

Gastroenterology Update



March 2022

Welcome to the first edition of the Gastroenterology Update. The aim of this publication is to bring together a range of recently published research and guidance that will help you make evidence-based decisions.

Accessing Articles

The following abstracts are taken from a selection of recently published articles.

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Changes to UpToDate and NICE Guidance (Sept 21 – March 22)

Percutaneous insertion of a cystic duct stent after cholecystostomy for acute calculous cholecystitis

Interventional procedures guidance [IPG720]

Published: 09 March 2022

<https://www.nice.org.uk/guidance/ipg720>

Endo-SPONGE for treating low rectal anastomotic leak

Medical technologies guidance [MTG63]

Published: 16 December 2021

<https://www.nice.org.uk/guidance/mtg63>

Transanal total mesorectal excision for rectal cancer

Interventional procedures guidance [IPG713]

Published: 15 December 2021

<https://www.nice.org.uk/guidance/ipg713>

SeHCAT (tauroselcholic [75 selenium] acid) for diagnosing bile acid diarrhoea

Diagnostics guidance [DG44]

Published: 17 November 2021

<https://www.nice.org.uk/guidance/dg44>

PredictSURE IBD and IBDX to guide treatment of Crohn's disease

Diagnostics guidance [DG45]

Published: 23 February 2022

<https://www.nice.org.uk/guidance/dg45>

Nivolumab for adjuvant treatment of resected oesophageal or gastro-oesophageal junction cancer

Technology appraisal guidance [TA746]

Published: 17 November 2021

<https://www.nice.org.uk/guidance/ta746>

Pembrolizumab with platinum- and fluoropyrimidine-based chemotherapy for untreated advanced oesophageal and gastro-oesophageal junction cancer

Technology appraisal guidance [TA737]

Published: 20 October 2021

<https://www.nice.org.uk/guidance/ta737>

Olaparib for maintenance treatment of BRCA mutation-positive metastatic pancreatic cancer after platinum-based chemotherapy (terminated appraisal)

Technology appraisal [TA750]

Published: 08 December 2021

<https://www.nice.org.uk/guidance/ta750>

Endoscopic full thickness removal of gastrointestinal stromal tumours of the stomach

Interventional procedures guidance [IPG717]

Published: 02 March 2022

<https://www.nice.org.uk/guidance/ipg717>

Avapritinib for treating unresectable or metastatic gastrointestinal stromal tumours (terminated appraisal)

Technology appraisal [TA730]

Published: 29 September 2021

<https://www.nice.org.uk/guidance/ta730>

UpToDate (please ensure you are logged into to UpToDate using the link from the windows startup menu or personal account before accessing)

What's new in gastroenterology and hepatology

Authors: Anne C Travis, MD, MSc, FACP, AGAF, Shilpa Grover, MD, MPH, AGAF, Kristen M Robson, MD, MBA, FACP

Literature review current through: Feb 2022. | This topic last updated: Mar 03, 2022.

https://www.uptodate.com/contents/whats-new-in-gastroenterology-and-hepatology?search=gastroenterology&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

A selection of papers from Medline, Embase, Cochrane and CINHAL (past 6 month-ish)

1. **Recommendations for the optimal use of mesalazine in the management of patients with mild to moderate ulcerative colitis**

Item Type: Journal Article

Authors: Akbar, Ayesha;Arnott, Ian;Kennedy, Nicholas A.;Nolan, Jonathan;Peake, Simon;Whiteoak, Simon R.;Probert, Chris;Fraser, Aileen;Cheshire, Alex;Lewis, Allyson;Sugrue, Kathleen;Laird, Susan and Scott, Glyn

Publication Date: 2022

Journal: Gastrointestinal Nursing 20(1), pp. 34-41

Abstract: The 2021 National report from IBD UK included responses from over 10 000 patients with inflammatory bowel disease, over 70% of whom reported having at least one flare in the last 12 months. As the first-line treatment for patients with mild and moderate ulcerative colitis, the action and delivery mechanisms of mesalazine are crucial for successful management of the disease. The choice of the most appropriate formulation of mesalazine and securing patient concordance and adherence to treatment remains a challenge for healthcare professionals. This article details the outcome of a roundtable discussion involving a group of gastroenterology consultants and specialist nurses which considered the importance of ensuring that patients have individualised mesalazine therapy before escalation to other treatments and gives recommendations for the management of patients with mild or moderate ulcerative colitis.

DOI: <https://libkey.io/10.12968/gasn.2022.20.1.34>

2. **Increased burden of cardiovascular disease in people with liver disease: unequal geographical variations, risk factors and excess years of life lost**

Item Type: Journal Article

Authors: Chang, Wai Hoong;Mueller, Stefanie H.;Chung, Sheng-Chia;Foster, Graham R. and Lai, Alvina G.

Publication Date: 2022

Journal: Journal of Translational Medicine 20(1), pp. 1-13

Abstract: Background: People with liver disease are at increased risk of developing cardiovascular disease (CVD), however, there has yet been an investigation of incidence burden, risk, and premature mortality across a wide range of liver conditions and cardiovascular outcomes.

Methods: We employed population-wide electronic health records (EHRs; from 1998 to 2020) consisting of almost 4 million adults to assess regional variations in disease burden of five liver conditions, alcoholic liver disease (ALD), autoimmune liver disease, chronic hepatitis B infection (HBV), chronic hepatitis C infection (HCV) and NAFLD, in England. We analysed regional differences in incidence rates for 17 manifestations of CVD in people with or without liver disease. The associations between biomarkers and comorbidities and risk of CVD in patients with liver disease were estimated using Cox models. For each liver condition, we estimated excess years of life lost (YLL) attributable to CVD (i.e., difference in YLL between people with or without CVD).

Results: The age-standardised incidence rate for any liver disease was 114.5 per 100,000 person years. The highest incidence was observed in NAFLD (85.5), followed by ALD (24.7), HCV (6.0), HBV (4.1) and autoimmune liver disease (3.7). Regionally, the North West and North East regions consistently exhibited high incidence burden. Age-specific incidence rate analyses revealed that the peak incidence for liver disease of non-viral aetiology is reached in individuals aged 50-59 years. Patients with liver disease had a two-fold higher incidence burden of CVD (2634.6 per 100,000 persons) compared to individuals without liver disease (1339.7 per 100,000 persons). When comparing across liver diseases, atrial fibrillation was the most common initial CVD presentation while hypertrophic cardiomyopathy was the least common. We noted strong positive associations between body mass index and current smoking and risk of CVD. Patients who also had diabetes, hypertension, proteinuric kidney disease, chronic kidney disease, diverticular disease and gastro-oesophageal reflux disorders had a higher risk of CVD, as do patients with low albumin, raised C-reactive protein and raised International Normalized Ratio levels. All types of CVD were associated with shorter life expectancies. When evaluating excess YLLs by age of CVD onset and by liver disease type, differences in YLLs, when comparing across CVD types, were more pronounced at younger ages.

Conclusions: We developed a public online app (https://lailab.shinyapps.io/cvd_in_liver_disease/) to showcase results interactively. We provide a blueprint that revealed previously underappreciated clinical factors related to the risk of CVD, which differed in the magnitude of effects across liver diseases. We found significant geographical variations in the burden of liver disease and CVD, highlighting the need to devise local solutions. Targeted policies and regional initiatives addressing underserved communities might help improve equity of access to CVD screening and treatment.

DOI: <https://libkey.io/10.1186/s12967-021-03210-9>

3. A collaborative coaching approach to practice learning and placement expansion in gastroenterology

Item Type: Journal Article

Authors: Hill, Rebekah;Coughlan, Claire;Regan, Cathy;Whayman, Kathy;Duncan, Julie;Ball, Alison and Hibberts, Fiona

Publication Date: 2022

Journal: Gastrointestinal Nursing 20(1), pp. 16-18

Abstract: Practice learning is an essential part of pre-registration nursing education, and the number of placements needs to be expanded to keep up with demand, including in NHS gastroenterology services. This potential could be reached with a collaborative coaching approach, with groups of up to six students in each specialist area working together, supported by assessors using a coaching strategy.

DOI: <https://libkey.io/10.12968/gasn.2022.20.1.16>

4. Antecolic versus retrocolic reconstruction after partial pancreaticoduodenectomy

Item Type: Journal Article

Authors: Hüttner, F. J.;Klotz, R.;Ulrich, A.;Büchler, M. W.;Probst, P. and Diener, M. K.

Publication Date: 2022

Journal: Cochrane Database of Systematic Reviews (1)

Abstract:

Background: Pancreatic cancer remains one of the five leading causes of cancer deaths in industrialised nations. For adenocarcinomas in the head of the gland and premalignant lesions, partial pancreaticoduodenectomy represents the standard treatment for resectable tumours. The gastro- or duodenojejunostomy after partial pancreaticoduodenectomy can be reestablished via either an antecolic or retrocolic route. The debate about the more favourable technique for bowel reconstruction is ongoing.

Objectives: To compare the effectiveness and safety of antecolic and retrocolic gastro- or duodenojejunostomy after partial pancreaticoduodenectomy.

Search methods: In this updated version, we conducted a systematic literature search up to 6 July 2021 to identify all randomised controlled trials (RCTs) in the Cochrane Central Register of Controlled Trials (CENTRAL), the Cochrane Library 2021, Issue 6, MEDLINE (1946 to 6 July 2021), and Embase (1974 to 6 July 2021). We applied no language restrictions. We handsearched reference lists of identified trials to identify further relevant trials, and searched the trial registries clinicaltrials.gov and World Health Organization International Clinical Trials Registry Platform for ongoing trials.

Selection criteria: We considered all RCTs comparing antecolic with retrocolic reconstruction of bowel continuity after partial pancreaticoduodenectomy for any given indication to be eligible.

Data collection and analysis: Two review authors independently screened the identified references and extracted data from the included trials. The same two review authors independently assessed risk of bias of included trials, according to standard Cochrane methodology. We used a random-effects model to pool the results of the individual trials in a meta-analysis. We used odds ratios (OR) to compare binary outcomes and mean differences (MD) for continuous outcomes.

Main results: Of a total of 287 citations identified by the systematic literature search, we included eight randomised controlled trials (reported in 11 publications), with a total of 818 participants. There was high risk of bias in all of the trials in regard to blinding of participants and/or outcome assessors and unclear risk for selective reporting in six of the trials. There was little or no difference in the frequency of delayed gastric emptying (OR 0.67; 95% confidence interval (CI) 0.41 to 1.09; eight trials, 818 participants, low-certainty

evidence) with relevant heterogeneity between trials ($I^2 = 40\%$). There was little or no difference in postoperative mortality (risk difference (RD) -0.00; 95% CI -0.02 to 0.01; eight trials, 818 participants, high-certainty evidence); postoperative pancreatic fistula (OR 1.01; 95% CI 0.73 to 1.40; eight trials, 818 participants, low-certainty evidence); postoperative haemorrhage (OR 0.87; 95% CI 0.47 to 1.59; six trials, 742 participants, low-certainty evidence); intra-abdominal abscess (OR 1.11; 95% CI 0.71 to 1.74; seven trials, 788 participants, low-certainty evidence); bile leakage (OR 0.82; 95% CI 0.35 to 1.91; seven trials, 606 participants, low-certainty evidence); reoperation rate (OR 0.68; 95% CI 0.34 to 1.36; five trials, 682 participants, low-certainty evidence); and length of hospital stay (MD -0.21; 95% CI -1.41 to 0.99; eight trials, 818 participants, low-certainty evidence). Only one trial reported quality of life, on a subgroup of 73 participants, also without a relevant difference between the two groups at any time point. The overall certainty of the evidence was low to moderate, due to some degree of heterogeneity, inconsistency and risk of bias in the included trials.

Authors' conclusions: There was low- to moderate-certainty evidence suggesting that antecolic reconstruction after partial pancreaticoduodenectomy results in little to no difference in morbidity, mortality, length of hospital stay, or quality of life. Due to heterogeneity in definitions of the endpoints between trials, and differences in postoperative management, future research should be based on clearly defined endpoints and standardised perioperative management, to potentially elucidate differences between these two procedures. Novel strategies should be evaluated for prophylaxis and treatment of common complications, such as delayed gastric emptying.

Plain language summary What are the benefits and risks of bowel reconstruction routes after partial surgical removal of the pancreas and duodenum (first part of the small intestine)? **Key messages** - Antecolic bowel reconstruction may not reduce delayed gastric emptying after partial surgical removal of the pancreatic head and duodenum. - Our results do not suggest any relevant differences between both techniques in other morbidity, mortality, length of hospital stay, and quality of life.

Background The pancreas is a digestive gland situated in the upper abdomen, which is also vital to normal control of blood sugar. Pancreatic cancer is one of the leading causes of cancer death in industrialised nations. The standard surgical treatment for cancer of the head of the gland and precancerous abnormalities is partial removal of the pancreas, together with the attached duodenum, known as a pancreaticoduodenectomy. Removal of the duodenum requires the restoration of the digestive pathway from the stomach to the rest of the gut. This can be accomplished by joining it to the jejunum (second part of the small intestine) either in front of (antecolic) or behind (retrocolic) the overlying large intestine (transverse colon).

What did we want to find out? We wanted to find out whether one of the above-mentioned two routes of reconstruction provides a benefit to the patient by reducing delayed gastric emptying (emptying of the stomach after ingestion of food); postoperative mortality (death); and other complications, such as pancreatic fistula (leakage of pancreatic juice), reoperation, perioperative measures (before, during, and after the operation), or length of hospital stay; and improving quality of life. Delayed gastric emptying was the primary outcome of this review because it is one of the most frequent complications after a pancreaticoduodenectomy; it can make it difficult to take anything by mouth and interferes with the patient's quality of life, often resulting in a prolonged hospital stay and delay of further treatment.

What did we do? We searched for studies that compared antecolic with retrocolic reconstruction in patients undergoing partial removal of the pancreas together with the duodenum. We compared and summarised the results of the studies and rated our confidence in the evidence, based on factors such as study methods and sizes.

What did we find? We included eight randomised controlled trials (reported in 11 publications), reporting data on a total of 818 adult participants, who underwent pancreaticoduodenectomy for any pancreatic disease.

Main results We did not identify relevant differences in delayed gastric emptying; postoperative mortality; postoperative pancreatic fistula, or other complications; reoperations; or length of hospital stay. Quality of life, only reported for a subset of participants in one trial, did not differ between the two groups. Our results do not suggest any relevant differences between antecolic and retrocolic reconstruction of the gastro- or duodenojejunostomy after partial pancreaticoduodenectomy.

What are the limitations of the evidence? Our confidence in the results is limited because the results from the studies varied widely, and most studies involved only small numbers of people. Most studies used methods likely to introduce errors. Therefore, the results should be interpreted in the light of these limitations. How up to

date is this evidence? This review updates our previous review. The evidence is current to July 2021.

DOI: <https://libkey.io/10.1002/14651858.CD011862>

5. Performance of routine risk scores for predicting cirrhosis-related morbidity in the community

Item Type: Journal Article

Authors: Innes, Hamish; Morling, Joanne R.; Buch, Stephan; Hamill, Victoria; Stickel, Felix and Guha, Indra Neil

Publication Date: 2022

Journal: Journal of Hepatology

Abstract:

BACKGROUND & AIMS: Models predicting an individual's ten-year risk of cirrhosis complications have not been developed for a community setting. Our objectives were to assess the performance of existing risk scores - both with and without genetic data - for predicting cirrhosis complications in the community., **METHODS:** We used a two-stage study design. In stage 1, a systematic review was conducted to identify risk scores derived from routine liver blood tests that have demonstrated prior ability to predict cirrhosis-related complication events. Risk scores identified from stage 1 were tested in a UK Biobank subgroup, comprising participants with a risk factor for chronic liver disease (stage 2). Cirrhosis complications were defined as hospitalisation for liver cirrhosis or presentation with hepatocellular carcinoma. Discrimination of risk scores with and without genetic data was assessed using the Wolbers C-index, Harrell's adequacy index, and cumulative incidence curves.,

RESULTS: Twenty risk scores were identified from the stage-1 systematic review. For stage-2, 197,509 UK biobank participants were selected. The cumulative incidence of cirrhosis complications at ten years was 0.58%; 95%CI:0.54-0.61 (1110 events). The top performing risk scores were APRI (C-index: 0.804; 95%CI: 0.788-0.820) and FIB4 (C-index: 0.780; 95%CI: 0.764-0.795). The ten-year cumulative incidence of cirrhosis complications for participants with an APRI score exceeding the 90th 95th and 99th percentile was 3.30%, 5.42% and 14.83%, respectively. Inclusion of established genetic risk loci associated with cirrhosis added <5% of new prognostic information to the APRI score and improved the C-index only minimally (i.e. from 0.804 to 0.809).,

CONCLUSIONS: Accessible risk scores derived from routine blood tests can be repurposed for estimating ten-year risk of cirrhosis morbidity in the community (particularly APRI and FIB4). Genetic data improves performance only minimally.,

LAY SUMMARY: New approaches are needed in community settings to reduce late diagnosis of chronic liver disease (CLD). Thus, in a community cohort, we assessed the performance of 20 routine risk scores for predicting 10-year risk of a cirrhosis complication event. We show that two routine risk scores in particular - "APRI" and "FIB4" - could be repurposed to estimate an individual's 10-year risk of cirrhosis morbidity. Adding genetic risk factor information to these scores improved performance only modestly. Copyright © 2022 European Association for the Study of the Liver. Published by Elsevier B.V. All rights reserved.

DOI: <https://libkey.io/https://dx.doi.org/10.1016/j.jhep.2022.02.022>

6. Proton pump inhibitor treatment initiated prior to endoscopic diagnosis in upper gastrointestinal bleeding

Item Type: Journal Article

Authors: Kanno, T.;Yuan, Y.;Tse, F.;Howden, C. W.;Moayyedi, P. and Leontiadis, G. I.

Publication Date: 2022

Journal: Cochrane Database of Systematic Reviews (1)

Abstract:

Background: Upper gastrointestinal (GI) bleeding is a common reason for emergency hospital admission. Proton pump inhibitors (PPIs) reduce gastric acid production and are used to manage upper GI bleeding. However, there is conflicting evidence regarding the clinical efficacy of proton pump inhibitors initiated before endoscopy in people with upper gastrointestinal bleeding.

Objectives: To assess the effects of PPI treatment initiated prior to endoscopy in people with acute upper GI bleeding. **Search methods** We searched the CENTRAL, MEDLINE, Embase and CINAHL databases and major conference proceedings to October 2008, for the previous versions of this review, and in April 2018, October 2019, and 3 June 2021 for this update. We also contacted experts in the field and searched trial registries and references of trials for any additional trials. **Selection criteria** We selected randomised controlled trials (RCTs) that compared treatment with a PPI (oral or intravenous) versus control treatment with either placebo, histamine-2 receptor antagonist (H₂RA) or no treatment, prior to endoscopy in hospitalised people with uninvestigated upper GI bleeding.

Data collection and analysis: At least two review authors independently assessed study eligibility, extracted study data and assessed risk of bias. Outcomes assessed at 30 days were: mortality (our primary outcome), rebleeding, surgery, high-risk stigmata of recent haemorrhage (active bleeding, non-bleeding visible vessel or adherent clot) at index endoscopy, endoscopic haemostatic treatment at index endoscopy, time to discharge, blood transfusion requirements and adverse effects. We used standard methodological procedures expected by Cochrane.

Main results: We included six RCTs comprising 2223 participants. No new studies have been published after the literature search performed in 2008 for the previous version of this review. Of the included studies, we considered one to be at low risk of bias, two to be at unclear risk of bias, and three at high risk of bias. Our meta-analyses suggest that pre-endoscopic PPI use may not reduce mortality (OR 1.14, 95% CI 0.76 to 1.70; 5 studies; low-certainty evidence), and may reduce rebleeding (OR 0.81, 95% CI 0.62 to 1.06; 5 studies; low-certainty evidence). In addition, pre-endoscopic PPI use may not reduce the need for surgery (OR 0.91, 95% CI 0.65 to 1.26; 6 studies; low-certainty evidence), and may not reduce the proportion of participants with high-risk stigmata of recent haemorrhage at index endoscopy (OR 0.80, 95% CI 0.52 to 1.21; 4 studies; low-certainty evidence). Pre-endoscopic PPI use likely reduces the need for endoscopic haemostatic treatment at index endoscopy (OR 0.68, 95% CI 0.50 to 0.93; 3 studies; moderate-certainty evidence). There were insufficient data to determine the effect of pre-endoscopic PPI use on blood transfusions (2 studies; meta-analysis not possible; very low-certainty evidence) and time to discharge (1 study; very low-certainty evidence). There was no substantial heterogeneity amongst trials in any analysis.

Authors' conclusions: There is moderate-certainty evidence that PPI treatment initiated before endoscopy for upper GI bleeding likely reduces the requirement for endoscopic haemostatic treatment at index endoscopy. However, there is insufficient evidence to conclude whether pre-endoscopic PPI treatment increases, reduces or has no effect on other clinical outcomes, including mortality, rebleeding and need for surgery. Further well-designed RCTs that conform to current standards for endoscopic haemostatic

treatment and appropriate co-interventions, and that ensure high-dose PPIs are only given to people who received endoscopic haemostatic treatment, regardless of initial randomisation, are warranted. However, as it may be unrealistic to achieve the optimal information size, pragmatic multicentre trials may provide valuable evidence on this topic.

Plain language summary: Proton pump inhibitor treatment started before endoscopy in upper gastrointestinal bleeding
Background Bleeding from the oesophagus (the canal that connects the throat to the stomach), stomach or duodenum (the first part of the small intestine) is a common medical emergency. Research has suggested that reducing the amount of acid in the stomach may help to control the bleeding, but it is unknown if it is beneficial to start such treatment early; that is, before endoscopy (the examination of the oesophagus, stomach and duodenum with a fiberoptic camera).
Review question We reviewed the evidence about the effect of one type of anti-acid drug (proton pump inhibitors) compared to either no treatment (placebo) or another type of anti-acid drug (histamine-2 receptor antagonists) started before endoscopy in people with upper gastrointestinal bleeding.

Study characteristics: The evidence is current to June 2021. We included six studies involving 2223 participants. All studies were conducted in a hospital setting, and included participants with clinical signs of upper gastrointestinal bleeding. These studies reported data for the following outcomes: death (5 studies, 2143 participants); recurrence of upper gastrointestinal bleeding (5 studies, 2121 participants); surgery (6 studies, 2223 participants); the proportion of participants with active bleeding or signs of recent serious bleeding at first endoscopy (4 studies, 1332 participants); and the need for endoscopic therapy (such as injecting medicines or cauterising blood vessels) for bleeding (3 studies, 1983 participants). One study reported data for time to discharge, and two studies reported data for blood transfusion requirement.
Key results It remains uncertain whether treatment with a proton pump inhibitor before endoscopy affected the risk of death, recurrent bleeding, need for surgery, the proportion of participants with findings of active or recent serious bleeding at first endoscopy, time to discharge or blood transfusion requirements. However, treatment with a proton pump inhibitor before endoscopy probably reduced the need for endoscopic treatment of bleeding.

Certainty of the evidence: The certainty (quality) of the evidence was low to moderate, due mainly to limitations in the design and execution of some studies, and the inability to get a precise estimate of the effect (due to inadequate numbers of participants and events in the included studies).

DOI: <https://libkey.io/10.1002/14651858.CD005415.pub4>

7. Effect of Adjuvant Steroid Therapy in type 3 Biliary Atresia: A Single-Center, Open-Label, Randomized Controlled Trial

Item Type: Journal Article

Authors: Lu, Xuexin;Jiang, Jingying;Shen, Zhen;Chen, Gong;Wu, Ying;Xiao, Xianmin;Yan, Weili and Zheng, Shan

Publication Date: 2022

Journal: Annals of Surgery

Abstract:

OBJECTIVE: To evaluate the efficacy and side effects of additional postoperative steroid therapy for type 3 biliary atresia (BA) versus the current routine care.,

SUMMARY BACKGROUND DATA: Whether steroid therapy post-Kasai portoenterostomy improves the outcomes of biliary atresia remains controversial. Clinical evidence from two randomized trials in the UK and USA do not support the routine use of steroid in the treatment of biliary atresia.,

METHODS: In this open-label randomized controlled trial, patients with type 3 BA were randomized to routine postoperative treatment with or without 10-12weeks of adjuvant steroid treatment. The primary outcome was the postoperative jaundice clearance rate with native liver at 6 months. The secondary outcomes included postoperative jaundice clearance rate at 3, 12 and 24 months, survival with native liver at 12 and 24 months, and serious adverse events within 3 months.,

RESULTS: Overall, 200 participants were randomized and allocated into either steroid or control group (n = 100/group). The proportion of participants that are jaundice free without liver transplantation was significantly higher in the steroid group than in the control group at 6 months (54.1% vs 31.0%, P = 0.0015). The native liver survival rate was higher postoperatively in the steroid group than in the control group at 12 (66.3% vs 50.0%, P = 0.02) and 24 (57.1% vs 40.0%, P = 0.02) months. The survival time with native liver was significantly longer in the steroid group than in the control group (median survival, steroid vs control: not reached vs 1.21 years, P = 0.02). There were no significant differences between the two groups in the mean occurrence of serious adverse events within 3 months (steroid vs control: 0.63 vs 0.45, P = 0.20).,

CONCLUSIONS: Postoperative adjuvant steroid intervention improved bile drainage and survival with native liver in type 3 BA patients, without increasing early-stage serious adverse events. Copyright © 2022 Wolters Kluwer Health, Inc. All rights reserved.

DOI: <https://libkey.io/https://dx.doi.org/10.1097/SLA.0000000000005407>

8. Associations between MRI T1 mapping, liver stiffness, quantitative MRCP, and laboratory biomarkers in children and young adults with autoimmune liver disease

Item Type: Journal Article

Authors: Mahalingam, Neeraja;Trout, Andrew T.;Gandhi, Deep B.;Sahay, Rashmi D.;Singh, Ruchi;Miethke, Alexander G. and Dillman, Jonathan R.

Publication Date: 2022

Journal: Abdominal Radiology 47(2), pp. 672-683

Abstract: Purpose: Define relationships between quantitative magnetic resonance imaging (MRI) metrics and clinical/laboratory data in a pediatric and young adult cohort with autoimmune liver disease (AILD).
Materials and methods: This prospective, cross-sectional study was institutional review board-approved. Patients enrolled in an institutional AILD registry were divided into groups: (1) autoimmune hepatitis (AIH) or (2) primary sclerosing cholangitis (PSC)/autoimmune sclerosing cholangitis (ASC). Participants underwent serum liver biochemistry testing and research MRI examinations, including 3D magnetic resonance cholangiopancreatography (MRCP), magnetic resonance elastography (MRE), and iron-corrected T1 mapping (cT1). MRCP + and LiverMultiScan (Perspectum Ltd., Oxford, UK) were used to post-process 3D MRCP and cT1 data. Multiple linear regression models were used to assess relationships. Results: 58 patients, 35 male, median age 16 years were included; 30 in the AIH group, 28 in the PSC/ASC group. After statistical adjustments for patient age, sex, presence of inflammatory bowel disease (IBD), specific diagnosis (PSC/ASC vs. AIH), and time from diagnosis to MRI examination, left hepatic bile duct maximum diameter was a statistically significant predictor of whole liver mean cT1, cT1 interquartile range (IQR), and MRE liver stiffness (p = 0.01–0.04). Seven laboratory values were significant predictors of whole liver cT1 IQR (p <

0.0001–0.04). Eight laboratory values and right hepatic bile duct median and maximum diameter were significant predictors of liver stiffness ($p < 0.0001$ –0.03).

Conclusions: Bile duct diameters and multiple laboratory biomarkers of liver disease are independent predictors of liver stiffness and cT1 IQR in pediatric patients with AILD.

DOI: <https://libkey.io/10.1007/s00261-021-03378-0>

9. Benefits of Structured Pediatric to Adult Transition in Inflammatory Bowel Disease: The TRANSIT Observational Study

Item Type: Journal Article

Authors: McCartney, Sara;Lindsay, James O.;Russell, Richard K.;Gaya, Daniel R.;Shaw, Ian;Murray, Charlie D.;Finney-Hayward, Tricia and Sebastian, Shaji

Publication Date: 2022

Journal: Journal of Pediatric Gastroenterology & Nutrition 74(2), pp. 208-214

Abstract: Objective: To evaluate the impact of structured transition from pediatric to adult inflammatory bowel disease (IBD) services on objective patient outcomes, including disease flares, admission rates, and healthcare resource use.

Methods: A retrospective observational study in 11 United Kingdom gastroenterology centers. Transition patients attended ≥ 2 visits to the gastroenterology service with both pediatric and adult personnel jointly present; non-transition patients transferred to adult services without joint visits. Data were collected from medical records for the 12-month periods before and after the date of the first visit involving adult IBD services (index visit).

Results: A total of 129 patients were included: 95 transition patients and 34 non-transition patients. In the 12 months post-index visit, transition patients had fewer disease flares ($P = 0.05$), were more likely to be steroid-free (71% vs 41%, $P < 0.05$), and were less likely to have an emergency department visit leading to hospital admission (5% vs 18%, $P < 0.05$). During this period, the mean estimated overall cost of care per patient was £1644.22 in the transition group and £1827.32 in the non-transition group ($P = 0.21$).

Conclusion: Structured transition from pediatric to adult IBD care services was associated with positive and cost-neutral outcomes in patients with pediatric IBD.

DOI: <https://libkey.io/10.1097/MPG.0000000000003244>

10. EUS-guided choledochoduodenostomy with electrocautery-enhanced lumen-apposing metal stents in patients with malignant distal biliary obstruction: multicenter collaboration from the United Kingdom and Ireland

Item Type: Journal Article

Authors: On, Wei;Paranandi, Bharat;Smith, Andrew M.;Venkatachalapathy, Suresh V.;James, Martin W.;Aithal, Guruprasad P.;Varbobitis, Ioannis;Cheriyian, Danny;McDonald, Ciaran;Leeds, John S.;Nayar, Manu

K.;Oppong, Kofi W.;Geraghty, Joe;Devlin, John;Ahmed, Wafaa;Scott, Ryan;Wong, Terence and Huggett, Matthew T.

Publication Date: 2022

Journal: Gastrointestinal Endoscopy 95(3), pp. 432-442

Abstract:

BACKGROUND AND AIMS: EUS-guided choledochoduodenostomy (EUS-CDD) with an electrocautery-enhanced lumen-apposing metal stent (EC-LAMS) has emerged as a viable method of establishing biliary drainage in patients with malignant distal biliary obstruction (MDBO). Our aim was to assess the efficacy, safety, and outcomes in patients with MDBO who underwent EUS-CDD with an EC-LAMS.,

METHODS: A retrospective review of consecutive patients with MDBO who underwent EUS-CDD with EC-LAMSs at 8 tertiary institutions across the United Kingdom and Ireland between September 2016 and November 2020 was undertaken.,

RESULTS: One hundred twenty patients (55% men) with a median age of 73 years (interquartile range, 17; range, 43-94) were included. The median follow-up period in 117 patients was 70 days (interquartile range, 169; range, 3-869), and 23 patients (19.2%) were alive at the end of the follow-up. Three patients were lost to follow-up. Technical success was achieved in 109 patients (90.8%). Clinical success (reduction of serum bilirubin to $\leq 50\%$ of original value within 14 days) was achieved in 94.8% of patients (92/97). The adverse event rate was 17.5% (n = 21). Biliary reintervention after initial technical success was required in 9 patients (8.3%).,

CONCLUSIONS: EUS-CDD with EC-LAMSs at tertiary institutions within a regional hepatopancreatobiliary network for treatment of MDBO was effective in those where ERCP was not possible or was unsuccessful. When technical failures or adverse events occur, most patients can be managed with conservative or endoscopic therapy. Crown Copyright © 2022. Published by Elsevier Inc. All rights reserved.

DOI: <https://libkey.io/https://dx.doi.org/10.1016/j.gie.2021.09.040>

11. The ALLEGRO trial: a placebo controlled randomised trial of intravenous lidocaine in accelerating gastrointestinal recovery after colorectal surgery

Item Type: Journal Article

Authors: Paterson, Hugh M.;Cotton, Seonaidh;Norrie, John;Nimmo, Susan;Foo, Irwin;Balfour, Angie;Speake, Doug;MacLennan, Graeme;Stoddart, Andrew;Innes, Karen;Cameron, Sarah;Aucott, Lorna and McCormack, Kirsty

Publication Date: 2022

Journal: Trials 23(1), pp. 84

Abstract:

BACKGROUND: Return of gastrointestinal (GI) function is fundamental to patient recovery after colorectal surgery and is required before patients can be discharged from hospital safely. Up to 40% of patients suffer

delayed return of GI function after colorectal surgery, causing nausea, vomiting and abdominal discomfort, resulting in longer hospital stay. Small, randomised studies have suggested perioperative intravenous (IV) lidocaine, which has analgesic and anti-inflammatory effects, may accelerate return of GI function after colorectal surgery. The ALLEGRO trial is a pragmatic effectiveness study to assess the benefit of perioperative IV lidocaine in improving return of GI function after elective minimally invasive (laparoscopic or robotic) colorectal surgery.,

METHODS: United Kingdom (UK) multi-centre double blind placebo-controlled randomised controlled trial in 562 patients undergoing elective minimally invasive colorectal resection. IV lidocaine or placebo will be infused for 6-12 h commencing at the start of surgery as an adjunct to usual analgesic/anaesthetic technique. The primary outcome will be return of GI function.,

DISCUSSION: A 6-12-h perioperative intravenous infusion of 2% lidocaine is a cheap addition to usual anaesthetic/analgesic practice in elective colorectal surgery with a low incidence of adverse side-effects. If successful in achieving quicker return of gut function for more patients, it would reduce the rate of postoperative ileus and reduce the duration of inpatient recovery, resulting in reduced pain and discomfort with faster recovery and discharge from hospital. Since colorectal surgery is a common procedure undertaken in every acute hospital in the UK, a reduced length of stay and reduced rate of postoperative ileus would accrue significant cost savings for the National Health Service (NHS).,

TRIAL REGISTRATION: EudraCT Number 2017-003835-12; REC Number 17/WS/0210 the trial was prospectively registered (ISRCTN Number: ISRCTN52352431); date of registration 13 June 2018; date of enrolment of first participant 14 August 2018. Copyright © 2022. The Author(s).

DOI: <https://libkey.io/https://dx.doi.org/10.1186/s13063-022-06021-5>

12. Physical activity advice in the UK bowel cancer screening setting: qualitative healthcare professional perspectives

Item Type: Journal Article

Authors: Semper, Kelly;Hernon, James;Wynter, Trevor;Baker, Katherine and Saxton, John M.

Publication Date: 2022

Journal: Health Promotion International 37(1), pp. 1-10

Abstract: Providing physical activity advice in the bowel cancer screening setting could help to reduce the risk of cancer and cardiometabolic disease in older adults. This study investigated the views of healthcare professionals (HCPs) regarding the provision of physical activity advice as part of the UK Bowel Cancer Screening Programme. A purposive sample of HCPs (aged 22–63 years, with 1–26 years of experience) from four bowel cancer screening disciplines (four endoscopists, four colorectal surgeons, four staff nurses and four specialist screening practitioners) were recruited from a large National Health Service gastroenterology unit. Data collection used individual interviews and focus groups, with topics being guided by an a priori topic guide. All interviews and focus groups were audio-recorded and transcribed verbatim. Three key themes, which contextualize the views and perceptions of HCPs recruited to the study, emerged from the framework analysis: (i) appraisal of the concept; (ii) perceived barriers to implementation; (iii) steps to implementation. While the general concept was viewed positively, there were differences of opinion and a range of perceived barriers were revealed. Ideas for effective implementation were also presented, taking into consideration the need for time efficiencies and importance of optimizing effectiveness. This qualitative study provided important insights into the perceptions of HCPs regarding the provision of physical activity advice in the bowel cancer screening setting, and yielded novel ideas for effective implementation.

DOI: <https://libkey.io/10.1093/heapro/daab088>

12. Machine Learning Approach to Classify Cardiovascular Disease in Patients With Nonalcoholic Fatty Liver Disease in the UK Biobank Cohort

Item Type: Journal Article

Authors: Sharma, Divya;Gotlieb, Neta;Farkouh, Michael E.;Patel, Keyur;Xu, Wei;Bhat, Mamatha and Xu, Wei

Publication Date: 2022

Journal: Journal of the American Heart Association 11(1), pp. 1-14

Abstract: Background: Nonalcoholic fatty liver disease (NAFLD) is the most prevalent liver disease worldwide. Cardiovascular disease (CVD) is the leading cause of mortality among patients with NAFLD. The aim of our study was to develop a machine learning algorithm integrating clinical, lifestyle, and genetic risk factors to identify CVD in patients with NAFLD.

Methods and Results: We created a cohort of patients with NAFLD from the UK Biobank, diagnosed according to proton density fat fraction from magnetic resonance imaging data sets. A total of 400 patients with NAFLD with subclinical atherosclerosis or clinical CVD, defined by disease codes, constituted cases and 446 NAFLD cases with no CVD constituted controls. We evaluated 7 different supervised machine learning approaches on clinical, lifestyle, and genetic variables for identifying CVD in patients with NAFLD. The most significant clinical and lifestyle variables observed by the predictive modeling were age (59 years 54.00-63.00 years]), hypertension (145 mm Hg 134.0-156.0 mm Hg] and 85 mm Hg 79.00-93.00 mm Hg]), waist circumference (98 cm 95.00-105.00 cm]), and sedentary lifestyle, defined as time spent watching TV >4 h/d. In the genetic data, single-nucleotide polymorphisms in IL16 and ANKLE1 gene were most significant. Our proposed ensemble-based integrative machine learning model achieved an area under the curve of 0.849 using the random forest modeling for CVD prediction.

Conclusions: We propose a machine learning algorithm that identifies CVD in patients with NAFLD through integration of significant clinical, lifestyle, and genetic risk factors. These patients with NAFLD at higher risk of CVD should be flagged for screening and aggressive treatment of their cardiometabolic risk factors to prevent cardiovascular morbidity and mortality.

DOI: <https://libkey.io/10.1161/JAHA.121.022576>

13. Post-polypectomy surveillance colonoscopy: Comparison of the updated guidelines

Item Type: Journal Article

Authors: Abu-Freha, Naim;Katz, Lior H.;Kariv, Revital;Vainer, Elez;Laish, Ido;Gluck, Nathan;Half, Elizabeth E. and Levi, Zohar

Publication Date: 2021

Journal: United European Gastroenterology Journal 9(6), pp. 681-687

Abstract: BACKGROUND: Recently, three updated guidelines for post-polypectomy colonoscopy surveillance (PPCS) have been published. These guidelines are based on a comprehensive summary of the literature, while some recommendations are similar, different surveillance intervals are recommended after detection of specific types of polyps.,

AIM: In this review, we aimed to compare and contrast these recommendations.,

METHODS: The updated guidelines for PPCS were reviewed and the recommendations were compared.,

RESULTS: For patients with 1-4 adenomas <10 mm with low-grade dysplasia, irrespective of villous components, or 1-4 serrated polyps <10 mm without dysplasia, the European Society of Gastrointestinal Endoscopy (ESGE) and British Society of Gastroenterology (BSG), the Association of Coloproctology of Great Britain and Ireland (ACPGBI) and Public Health England (PHE) (BSG/ACPGBI/PHE) guidelines do not recommend colonoscopic surveillance and instead recommend that the participate in routine CRC screening program (typically based on the fecal immunochemical test), while the USMSTF recommends surveillance colonoscopies 7-10 years after diagnosis of 1-2 tubular adenomas <10 mm and 3-5 years for 3-4 tubular adenomas of the same size. The USMSTF define adenomas with tubulovillous or villous histology as high-risk adenomas; thus, surveillance colonoscopy is recommended after 3 years. However, the ESGE and BSG do not consider such histology as a criterion for repeating colonoscopy at this short interval. For patients with 1-2 sessile serrated polyps (SSPs) <10 mm and those with 3-4 SSPs <10 mm, the USMSTF recommends surveillance colonoscopy after 5-10 and 3-5 years, respectively. Copyright © 2021 The Authors. United European Gastroenterology Journal published by Wiley Periodicals LLC. on behalf of United European Gastroenterology.

DOI: <https://libkey.io/https://dx.doi.org/10.1002/ueg2.12106>

15. Recommendations for the optimal use of mesalazine in the management of patients with mild to moderate ulcerative colitis

Item Type: Journal Article

Authors: Akbar, Ayesha;Arnott, Ian;Kennedy, Nicholas A.;Nolan, Jonathan;Peake, Simon;Whiteoak, Simon R.;Probert, Chris;Fraser, Aileen;Cheshire, Alex;Lewis, Allyson;Sugrue, Kathleen;Laird, Susan and Scott, Glyn

Publication Date: 2021

Journal: British Journal of Hospital Medicine (17508460) 82(10), pp. 1-11

Abstract: The 2021 National report from IBD UK included responses from over 10 000 patients with inflammatory bowel disease, over 70% of whom reported having at least one flare in the last 12 months. As the first-line treatment for patients with mild and moderate ulcerative colitis, the action and delivery mechanisms of mesalazine are crucial for successful management of the disease. The choice of the most appropriate formulation of mesalazine and securing patient concordance and adherence to treatment remains a challenge for healthcare professionals. This article details the outcome of a roundtable discussion involving a group of gastroenterology consultants and specialist nurses which considered the importance of ensuring that patients have individualised mesalazine therapy before escalation to other treatments and gives recommendations for the management of patients with mild or moderate ulcerative colitis.

DOI: <https://libkey.io/10.12968/hmed.2021.0399>

16. The Bowel Cancer Screening Programme Expert Board: an analysis of activity during 2017-2020

Item Type: Journal Article

Authors: Bateman, Adrian C.;Kurn, Octavia R.;Novelli, Marco R.;Rodriguez-Justo, Manuel;Shepherd, Neil A. and Wong, Newton A. C. S.

Publication Date: 2021

Journal: Histopathology

Abstract:

AIMS: The inception of the National Health Service Bowel Cancer Screening Programme in England in 2006 highlighted the fact that the differential diagnosis between the presence of epithelial misplacement and adenocarcinoma occurring in colorectal adenomas is problematic. The pathology Expert Board (EB) was created to facilitate the review of difficult cases by a panel of three experienced gastrointestinal pathologists. This article describes a review of the work of the EB over a 4-year period (2017-2020).,

METHODS AND RESULTS: Four hundred and thirty polyps were referred to the EB from 193 pathologists and 76 hospitals during this time. The EB diagnosis was benign for 67%, malignant for 28%, and equivocal for 2% (with no consensus in the remainder). The most common diagnosis change made by the EB was from malignant to benign-made in 50% of polyps referred with an initially malignant diagnosis. The level of agreement between the individual EB members was 'good' (kappa score of 0.619) but that between the EB and the referring diagnosis was 'poor' (kappa score of 0.149). Data from one EB member indicated that the presence of lamina propria, features of torsion and cytological similarity between the superficial and deep glands were predictors of a benign diagnosis, whereas the presence of irregular neoplastic glands, a desmoplastic reaction and lymphovascular invasion were commonly observed features in polyps with a malignant diagnosis.,

CONCLUSION: Diagnostic agreement between EB members is better than that between the EB and referring pathologists. There was a consistent trend for the EB to change diagnoses from malignant to benign. Copyright © 2021 John Wiley & Sons Ltd.

DOI: <https://libkey.io/https://dx.doi.org/10.1111/his.14597>

17. Providing gastrointestinal nurse education during the pandemic

Item Type: Journal Article

Authors: Burch, Jennifer

Publication Date: 2021

Journal: British Journal of Nursing 30(19), pp. 1146-1148

Abstract: Jennifer Burch, Head of Gastrointestinal Nurse Education, St Mark's Hospital, London North West University Healthcare NHS Trust (jburch1@nhs.net), was runner-up in the Gastrointestinal/Inflammatory Bowel Disease Nurse of the Year category of the British Journal of Nursing Awards 2021

DOI: <https://libkey.io/10.12968/bjon.2021.30.19.1146>

18. Interventions for preventing distal intestinal obstruction syndrome (DIOS) in cystic fibrosis

Item Type: Journal Article

Authors: Carroll, W.;Green, J. and Gilchrist, F. J.

Publication Date: 2021

Journal: Cochrane Database of Systematic Reviews (12)

Abstract:

Background: Cystic fibrosis (CF) is the most common, life-limiting, genetically inherited disease. It affects multiple organs, particularly the respiratory system. However, gastrointestinal problems such as constipation and distal intestinal obstruction syndrome (DIOS) are also important and well-recognised complications in CF. They share similar symptoms e.g. bloating, abdominal pain, but are distinct conditions. Constipation occurs when there is gradual faecal impaction of the colon, but DIOS occurs when there is an accumulation of faeces and sticky mucus, forming a mass in the distal part of the small intestine. The mass may partially block the intestine (incomplete DIOS) or completely block the intestine (complete DIOS). Symptoms of DIOS can affect quality of life and other aspects of CF health, such as airway clearance, exercise, sleep and nutritional status. Treatment of constipation and prevention of complete bowel obstruction are required for gastrointestinal management in CF. However, many different strategies are used in clinical practice and there is a lack of consensus. The importance of this topic was highlighted in a recent research priority setting exercise by the James Lind Alliance. Objectives To evaluate the effectiveness and safety of laxative agents of differing types for preventing DIOS (complete and incomplete) in children and adults with CF.

Search methods: We searched the Cochrane Cystic Fibrosis and Genetic Disorders Group Trials Register comprising references identified from comprehensive electronic database searches and handsearches of relevant journals and abstract books of conference proceedings. Date of search: 09 September 2021. We also searched online trial registries. Date of last search: 12 October 2021.

Selection criteria: Randomised and quasi-randomised controlled parallel trials comparing laxative therapy for preventing DIOS (including osmotic agents, stimulants, mucolytics and substances with more than one action) at any dose to placebo, no treatment or an alternative laxative therapy, in people of any age with pancreatic sufficient or insufficient CF and any stage of lung disease. Randomised cross-over trials were judged on an individual basis.

Data collection and analysis: Two authors independently assessed trials for inclusion, extracted outcome data and performed a risk of bias assessment for the included data. We judged the certainty of the evidence using GRADE criteria. Main results We included one cross-over trial (17 participants) with a duration of 12 months, in which participants were randomly allocated to either cisapride (a gastro-prokinetic agent) or placebo for six months each. The trial had an unclear risk of bias for most domains but had a high risk of reporting bias. Radiograph scores revealed no difference in occurrence of DIOS between cisapride and placebo (narrative report, no data provided). There were no adverse effects. Symptom scores were the only secondary outcome within the review that were reported. Total gastrointestinal symptom scores favoured cisapride with a statistically significant mean difference (MD) of -7.60 (95% confidence interval (CI) -14.73 to -0.47). There was no significant difference at six months between cisapride and placebo for abdominal distension, MD -0.90 (95% CI -2.39 to 0.59) or abdominal pain, MD -0.4 (95% CI -2.05 to 1.25). The global symptom scores (whether individuals felt better or worse) were reported in the paper to favour cisapride and be statistically significant ($P < 0.05$). We assessed the available data to be very low certainty. There was a great deal of missing data from the included trial and the investigators failed to report numerical data for many outcomes. The overall risk of bias of the trial was unclear and it had a high risk for reporting bias. There was also indirectness; the trial drug

(cisapride) has since been removed from the market in several countries due to adverse effects, thus it has no current applicability for preventing DIOS. The included trial also had very few participants, which downgraded the certainty a further level for precision.

Authors' conclusions: There is an absence of evidence for interventions for the prevention of DIOS. As there was only one included trial, we could not perform a meta-analysis of the data. Furthermore, the included trial compared a prokinetic agent (cisapride) that is no longer licensed for use in a number of countries due to the risk of serious cardiac events, a finding that came to light after the trial was conducted. Therefore, the limited findings from the trial are not applicable in current clinical practice. Overall, a great deal more research needs to be undertaken on gastrointestinal complications in CF, as this is a very poorly studied area compared to respiratory complications in CF.

Plain language summary Which interventions are effective and safe for preventing distal intestinal obstruction syndrome (DIOS) in cystic fibrosis? **Background** Cystic fibrosis (CF) is an inherited, life-long condition that causes organ systems in the body to produce large amounts of thick and sticky mucus. The most commonly affected area is the lungs, in which thick mucus leads to recurrent chest infections and breathing difficulties. Another commonly affected area is the digestive system. Many people with CF suffer from bloating and abdominal pain which may be caused by constipation or distal intestinal obstruction syndrome (DIOS). In DIOS, overproduction of thick mucus combines with stool and sticks to the intestinal wall. This mass can partially block the intestine (incomplete DIOS) or completely block the intestine (complete DIOS). The latter causes severe pain, vomiting and is treated as a medical emergency. As part of effective care for people with CF, constipation should therefore be treated and complete bowel obstruction be prevented. It is also important to recognise that constipation and DIOS impact on other aspects of CF health. Bloating, abdominal pain and nausea may affect airway clearance, exercise and sleep. Nutritional status may also be affected due to decreased appetite and malabsorption. DIOS may affect the absorption of other medications taken by people with CF. Overall, DIOS can significantly impair quality of life. Different laxatives are currently used in clinics, but prescribing practices differ and there is no consensus on optimal treatment strategies. Hence, this review aimed to analyse the evidence for the preventing DIOS. **Search date** We last searched for evidence: 12 October 2021.

Trial characteristics: We included one trial in the review, which included 17 people aged between 13 to 35 years. These people were randomly put into groups to take either a placebo drug (with no active medication) or cisapride for six months each and then to cross over and take the alternative treatment for a further six months. **Key results** The trial used radiography to diagnose DIOS, but did not provide any data and only stated that there was no difference between cisapride and placebo. The trial also stated that there were no adverse effects from the cisapride. The trial assessed participant-reported total and individual gastrointestinal symptom scores. People in the cisapride group reported an improvement in total gastrointestinal symptom scores compared to those in the placebo group. However, there were no differences reported between groups for the individual symptom scores of abdominal pain and abdominal distension (swelling). Participants also reported global symptom scores, which showed that most people felt better taking cisapride compared to placebo. **Certainty of the evidence** The overall certainty of the evidence was very low. With one trial in this review, we could not combine data from different trials. The trial did not provide enough information about the methods used for allocating participants or about missing data and did not fully report certain results. The small number of participants also lowered the precision of the results. Since this trial was conducted, cisapride has been removed from the market in a number of countries due to rare but serious heart complications, therefore it has no applicability to current clinical practice.

DOI: <https://libkey.io/10.1002/14651858.CD012619.pub3>

19. The efficacy and safety of controlled low central venous pressure for liver resection: A systematic review and meta-analysis

Item Type: Journal Article

Authors: Chen, Z.;Sun, D. and Wang, F.

Publication Date: 2021

Journal: British Journal of Surgery 108

Abstract:

Background: Partial hepatectomy is an effective treatment for benign and malignant liver diseases . However, intraoperative bleeding is one of the major factors affecting the outcome of hepatectomy. Currently, the most commonly used method of hepatic blood flow occlusion in clinical practice is Pringle method, but this method has a great impact on liver function and can cause hepatic ischemia-reperfusion injury. .Studies have shown that blood loss volume during hepatectomy is related to central venous pressure (CVP) . Intraoperative control of central venous pressure (LCVP) is increasingly popular in hepatectomy, but its effectiveness and safety remain controversial.

Method(s): The main result of the analysis was to reduce the blood loss and blood infusion. Secondary outcomes included operative time, fluid infusion, urine volume, ALT, TBIL, BUN, CR, postoperative complication rates and length of hospital stay. Statistical analysis was performed using RevMan 5.3 software (Cochrane Collaboration, Oxford, England). The results of all studies were measured by mean +/- standard deviation. If there is significant heterogeneity between the results (P<0.05). Heterogeneity was assessed using the Cochrane chi2 test .

Result(s): In total, 10 studies, involving 324 patients undergoing liver resection with controlled low central venous pressure, were identified. Meta-analysis showed that blood loss in the LCVP group was significantly less than that in the control group (P = 0.0002). blood transfusion in the LCVP group was also significantly less than that in the control group(P = 0.0006). there was no difference between LCVP group and control group in operation time(P = 0.17), fluid infusion(P = 0.46), urinary volume(P = 0.38), ALT(P = 0.23), TBIL(P = 0.86), BUN(P = 0.67), CR(P =0.59), postoperative complication rates(P = 0.01) and hospital stay(P = 0.26).

Conclusion(s): Compared with the control, controlled low central venous pressure showed comparable efficacy and safety for the treatment during liver resection.

DOI: <https://libkey.io/https://dx.doi.org/10.1093/bjs/znab430.096>

20. No title

Item Type: Journal Article

Authors: Cooke, Graham S.;Pett, Sarah;McCabe, Leanne;Jones, Christopher;Gilson, Richard;Verma, Sumita;Ryder, Stephen D.;Collier, Jane D.;Barclay, Stephen T.;Ala, Aftab;Bhagani, Sanjay;Nelson, Mark;Ch'Ng, Chin Lye;Stone, Benjamin;Wiselka, Martin;Forton, Daniel;McPherson, Stuart;Halford, Rachel;Nguyen, Dung;Smith, David, et al

Publication Date: 2021

Abstract: BACKGROUND: High cure rates with licensed durations of therapy for chronic hepatitis C virus suggest that many patients are overtreated. New strategies in individuals who find it challenging to adhere to standard treatment courses could significantly contribute to the elimination agenda.,

OBJECTIVES: To compare cure rates using variable ultrashort first-line treatment stratified by baseline viral load followed by retreatment, with a fixed 8-week first-line treatment with retreatment with or without adjunctive ribavirin., **DESIGN:** An open-label, multicentre, factorial randomised controlled trial.,

RANDOMISATION: Randomisation was computer generated, with patients allocated in a 1 : 1 ratio using a factorial design to each of biomarker-stratified variable ultrashort strategy or fixed duration and adjunctive ribavirin (or not), using a minimisation algorithm with a probabilistic element.,

SETTING: NHS., **PARTICIPANTS:** A total of 202 adults (aged ≥ 18 years) infected with chronic hepatitis C virus genotype 1a/1b or 4 for ≥ 6 months, with a detectable plasma hepatitis C viral load and no significant fibrosis FibroScan R (Echosens, Paris, France) score F0-F1 or biopsy-proven minimal fibrosis], a hepatitis C virus viral load 24 weeks on anti-human immunodeficiency virus drugs., **INTERVENTIONS:** Fixed-duration 8-week first-line therapy compared with variable ultrashort first-line therapy, initially for 4-6 weeks (continuous scale) stratified by screening viral load (variable ultrashort strategy 1, mean 32 days of treatment) and then, subsequently, for 4-7 weeks (variable ultrashort strategy 2 mean 39 days of duration), predominantly with ombitasvir, paritaprevir, ritonavir (Viekirax R; AbbVie, Chicago, IL, USA), and dasabuvir (Exviera R; AbbVie, Chicago, IL, USA) or ritonavir. All patients in whom first-line treatment was unsuccessful were immediately retreated with 12 weeks' sofosbuvir, ledipasvir (Harvoni R, Gilead Sciences, Inc., Foster City, CA, USA) and ribavirin.,

MAIN OUTCOME MEASURE: The primary outcome was overall sustained virological response (persistently undetectable) 12 weeks after the end of therapy (SVR12).,

RESULTS: A total of 202 patients were analysed. All patients in whom the primary outcome was evaluable achieved SVR12 overall 100% (197/197), 95% confidence interval 86% to 100%], demonstrating non-inferiority between fixed- and variable-duration strategies (difference 0%, 95% confidence interval -3.8% to 3.7%, prespecified non-inferiority margin 4%). A SVR12 following first-line treatment was achieved in 91% (92/101; 95% confidence interval 86% to 97%) of participants randomised to the fixed-duration strategy and by 48% (47/98; 95% confidence interval 39% to 57%) allocated to the variable-duration strategy. However, the proportion achieving SVR12 was significantly higher among those allocated to variable ultrashort strategy 2 72% (23/32), 95% confidence interval 56% to 87%] than among those allocated to variable ultrashort strategy 1 36% (24/66), 95% confidence interval 25% to 48%]. Overall, a SVR12 following first-line treatment was achieved by 72% (70/101) (95% confidence interval 65% to 78%) of patients treated with ribavirin and by 68% (69/98) (95% confidence interval 61% to 76%) of those not treated with ribavirin. A SVR12 with variable ultrashort strategies 1 and 2 was 52% (25/48) (95% confidence interval 38% to 65%) with ribavirin, compared with 44% (22/50) (95% confidence interval 31% to 56) without. However, at treatment failure, the emergence of viral resistance was lower with ribavirin 12% (3/26), 95% confidence interval 2% to 30%] than without 38% (11/29), 95% confidence interval 21% to 58%; $p = 0.01$]. All 10 individuals who became undetectable at day 3 of treatment achieved first-line SVR12 regardless of treatment duration. Five participants in the variable-duration arm and five in the fixed-duration arm experienced serious adverse events ($p = 0.69$), as did five participants receiving ribavirin and five participants receiving no ribavirin.,

CONCLUSIONS: SVR12 rates were significantly higher when ultrashort treatment varied between 4 and 7 weeks, rather than between 4 and 6 weeks. We found no evidence of ribavirin significantly affecting first-line SVR12, with unsuccessful first-line short-course therapy also not compromising subsequent retreatment with sofosbuvir, ledipasvir and ribavirin., **FUTURE WORK:** A priority for future work needs to be the development and evaluation of robust predictive measures to identify those patients who can be cured with ultrashort courses of therapy., **TRIAL REGISTRATION:** Current Controlled Trials ISRCTN37915093, EudraCT 2015-005004-28 and CTA 19174/0370/001-0001.,

FUNDING: This project was funded by the Efficacy and Mechanism Evaluation programme, a MRC and National Institute for Health Research (NIHR) partnership. This will be published in full in Efficacy and Mechanism Evaluation; Vol. 8, No. 17. See the NIHR Journals Library website for further project information. Copyright © 2021 Cooke et al. This work was produced by Cooke et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This is an Open Access publication distributed under the

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DOI: <https://libkey.io/https://dx.doi.org/10.3310/eme08170>

21. Temporality of clinical factors associated with pancreatic cancer: a case-control study using linked electronic health records

Item Type: Journal Article

Authors: Dayem Ullah, Abu Z. M.; Stasinou, Konstantinos; Chelala, Claude and Kocher, Hemant M.

Publication Date: 2021

Journal: BMC Cancer 21(1), pp. 1-13

Abstract:

Background: Pancreatic cancer risk is poorly quantified in relation to the temporal presentation of medical comorbidities and lifestyle. This study aimed to examine this aspect, with possible influence of demographics.

Methods: We conducted a retrospective case-control study on the ethnically-diverse population of East London, UK, using linked electronic health records. We evaluated the independent and two-way interaction effects of 19 clinico-demographic factors in patients with pancreatic cancer (N = 965), compared with non-malignant pancreatic conditions (N = 3963) or hernia (control; N = 4355), reported between April 1, 2008 and March 6, 2020. Risks were quantified by odds ratios (ORs) and 95% confidence intervals (CIs) from multivariable logistic regression models.

Results: We observed increased odds of pancreatic cancer incidence associated with recent-onset diabetes occurring within 6 months to 3 years before cancer diagnosis (OR 1.95, 95% CI 1.25-3.03), long-standing diabetes for over 3 years (OR 1.74, 95% CI 1.32-2.29), recent smoking (OR 1.81, 95% CI 1.36-2.4) and drinking (OR 1.76, 95% CI 1.31-2.35), as compared to controls but not non-malignant pancreatic conditions. Pancreatic cancer odds was highest for chronic pancreatic disease patients (recent-onset: OR 4.76, 95% CI 2.19-10.3, long-standing: OR 5.1, 95% CI 2.18-11.9), amplified by comorbidities or harmful lifestyle. Concomitant diagnosis of diabetes, upper gastrointestinal or chronic pancreatic conditions followed by a pancreatic cancer diagnosis within 6 months were common, particularly in South Asians. Long-standing cardiovascular, respiratory and hepatobiliary conditions were associated with lower odds of pancreatic cancer.

Conclusions: Several factors are, independently or via effect modifications, associated with higher incidence of pancreatic cancer, but some established risk factors demonstrate similar magnitude of risk measures of developing non-malignant pancreatic conditions. The findings may inform refined risk-stratification strategies and better surveillance for high-risk individuals, and also provide a means for systematic identification of target population for prospective cohort-based early detection research initiatives.

DOI: <https://libkey.io/10.1186/s12885-021-09014-w>

22. Endoscopic evaluation after acute colonic diverticulitis: Review of literature

Item Type: Journal Article

Authors: Eltyeb, H. A. and Subramonia, S.

Publication Date: 2021

Journal: British Journal of Surgery 108

Abstract:

Aim: To compare the current evidence for routine endoscopic evaluation of the colon after an episode of acute diverticulitis against existing guidelines in the United Kingdom.

Methodology: A systematic literature search of Medline, Embase and Cochrane databases was performed using keywords "Diverticular disease", "Diverticulitis", "acute", "Colorectal Cancer" and "endoscopy".

Recommendations from guidelines of specialist medical societies were reviewed. Available literature was explored to assess the risk of colorectal cancer in patients presenting with acute diverticulitis.

Result(s): The most recent UK guideline (Royal College of Surgeons Commissioning guide 2014 supported by ACPGBl) recommends the routine evaluation of colonic lumen after resolution of an acute attack of diverticulitis. More recent guidelines from specialist medical societies (European Society of Coloproctology 2020, World Society of Emergency Surgery 2020, European Association for Endoscopic Surgery and Society of American Gastrointestinal and Endoscopic Surgeons 2018) do not recommend routine endoscopic evaluation after recovery from uncomplicated colonic diverticulitis. Two meta-analyses as well as three large cohort studies showed no significant risk of colorectal cancer ((1.22% (95% confidence interval 0.63-1.97) and (0.7%; confidence interval 0.3%-1.4%)) following uncomplicated acute diverticulitis.

Conclusion(s): Existing UK guidance on routine colonic luminal evaluation after resolution of acute diverticulitis should be revised based on current evidence.

DOI: <https://libkey.io/https://dx.doi.org/10.1093/bjs/znab361.011>

23. Gastrointestinal consequences of cancer treatment: evaluation of 10 years' experience at a tertiary UK centre

Item Type: Journal Article

Authors: Gadhok, Radha;Paulon, Emma;Tai, Chehkuan;Olushola, Tomisin;Barragry, John;Rahman, Farooq;Di Caro, Simona and Mehta, Shameer

Publication Date: 2021

Journal: Frontline Gastroenterology 12(6), pp. 471-477

Abstract:

Objective: Up to 90% of patients treated for pelvic cancers experience chronic gastrointestinal (GI) symptoms. This study characterises this patient cohort at a single centre, addressing a paucity of publications reporting 'real-world' experiences.,

Method: Outpatient referrals, from oncology to the gastroenterology and nutrition services, at a tertiary London hospital from 2006 to 2016, were retrospectively identified. Patient characteristics, reported symptoms, investigations, diagnoses, response to therapeutics and follow-up were recorded. **Results:** Of 269 patients referred, 81% were within the latter 5 years. A total of 260 patients had diagnoses of pelvic cancers (prostatic (52%), cervical (19%) and endometrial (19%)). Among 247 treated with radiotherapy, the median time from radiotherapy to symptom onset was 8 months. Common symptoms were rectal bleeding (51%), diarrhoea (32%), faecal urgency (19%) and pain (19%). Patients underwent a median of three investigations including lower GI endoscopy (86%), thyroid function tests (33%) and glucose hydrogen breath test (30%). Diagnoses included radiation proctopathy (39%), colonic polyps (16%), pelvic floor dysfunction (12%), bile acid malabsorption (BAM) (8%), small intestinal bacterial overgrowth (SIBO) (8%), vitamin D deficiency (7%) and iron deficiency (7%). Among 164 discharged patients, the time to discharge was 7 months, after a median of two appointments.

Conclusions: This unique patient group reports a complex mix of symptoms and requires specialist review and consideration of often uninvestigated diagnoses (pelvic dysfunction, BAM, SIBO and nutritional deficiencies). Such patients are often overlooked, compared with those suffering many other chronic GI disorders. Further reports from non-dedicated centres treating patients with pelvic radiation disease will aid in understanding of secondary GI diagnoses and variation in practice. Copyright © Author(s) (or their employer(s)) 2021. No commercial re-use. See rights and permissions. Published by BMJ.

DOI: <https://libkey.io/https://dx.doi.org/10.1136/flgastro-2020-101430>

24. Economic burden and cost-effective management of chronic hepatitis b (chb): A systematic literature review (slr)

Item Type: Journal Article

Authors: Gielen, V.;Kendrick, S. F. W.;Pandey, R.;Mittal, R.;Bethi, S. and Evitt, L.

Publication Date: 2021

Journal: Hepatology 74, pp. 378A-379A

Abstract: Background: CHB is a public health problem but a comprehensive summary of the economic burden and costeffectiveness (CE) of treatments associated with CHB is unavailable. Therefore, the current SLR was conducted.

Method(s): A PRISMA-compliant SLR was conducted to identify evidence reporting cost, health resource utilization and CE in CHB. EMBASE, MEDLINE, Cochrane & NHS EED were searched for these data published between Jan-2004 to Feb-2020.

Result(s): We reviewed 1720 abstracts and included 165 studies. Existing literature suggests that the economic burden of CHB is increasing, with a recent US study showing up to a 4-fold increase from 2006-2015. The economic burden of CHB was driven by drug utilization and inpatient care depending on disease states: medication use was the largest cost component for CHB and compensated cirrhosis (CC), while hospitalization was the largest component for hepatocellular carcinoma (HCC) and liver transplantation. Complications drive the overall economic burden as patients (pts) with HCC or decompensated cirrhosis (DC) had 6-10-fold higher cost vs pts without complications. Studies across various geographies reported that nucleos(t)ide analogues (NAs) were cost-effective in guideline recommended populations (HBeAg-positive/negative CHB). Entecavir and tenofovir are more cost-effective than interferon (IFN). However, pegylated (PEG)-IFN CE was improved when a 12-week stopping rule was applied. Two studies in immune tolerant (IT) pts showed NA treatment was cost-

effective compared to delaying NA treatment until active CHB from a healthcare system perspective and considering both the healthcare system and societal perspective, NA is dominant to delaying treatment. CE of treatments in CHB was largely driven by HBV DNA suppression and HBeAg seroconversion mediated risk reduction of CC, DC and HCC development, resulting in cost savings and quality adjusted life years gained.

Conclusion(s): Advanced liver complications are the main contributor in the economic burden of CHB, and reduced risk of developing complications drives CE of current therapies. Data from PEG-IFN suggest that identifying pts who are unlikely to respond to treatment for early termination will minimize the futility of full-treatment courses, save costs, and avoid unnecessary side effects. Additionally, evidence suggests that early NA treatment strategy in IT pts is costeffective and therefore should be considered. Funding(s): GSK (209774).

DOI: <https://libkey.io/http://dx.doi.org/10.1002/hep.32188>

25. Predictive values for different cancers and inflammatory bowel disease of 6 common abdominal symptoms among more than 1.9 million primary care patients in the UK: A cohort study

Item Type: Journal Article

Authors: Herbert, Annie;Rafiq, Meena;Pham, Tra My;Renzi, Cristina;Abel, Gary A.;Price, Sarah;Hamilton, Willie;Petersen, Irene and Lyratzopoulos, Georgios

Publication Date: 2021

Journal: PLoS Medicine 18(8), pp. 1-20

Abstract:

Background: The diagnostic assessment of abdominal symptoms in primary care presents a challenge. Evidence is needed about the positive predictive values (PPVs) of abdominal symptoms for different cancers and inflammatory bowel disease (IBD).

Methods and Findings: Using data from The Health Improvement Network (THIN) in the United Kingdom (2000-2017), we estimated the PPVs for diagnosis of (i) cancer (overall and for different cancer sites); (ii) IBD; and (iii) either cancer or IBD in the year post-consultation with each of 6 abdominal symptoms: dysphagia (n = 86,193 patients), abdominal bloating/distension (n = 100,856), change in bowel habit (n = 106,715), rectal bleeding (n = 235,094), dyspepsia (n = 517,326), and abdominal pain (n = 890,490). The median age ranged from 54 (abdominal pain) to 63 years (dysphagia and change in bowel habit); the ratio of women/men ranged from 50%:50% (rectal bleeding) to 73%:27% (abdominal bloating/distension). Across all studied symptoms, the risk of diagnosis of cancer and the risk of diagnosis of IBD were of similar magnitude, particularly in women, and younger men. Estimated PPVs were greatest for change in bowel habit in men (4.64% cancer and 2.82% IBD) and for rectal bleeding in women (2.39% cancer and 2.57% IBD) and lowest for dyspepsia (for cancer: 1.41% men and 1.03% women; for IBD: 0.89% men and 1.00% women). Considering PPVs for specific cancers, change in bowel habit and rectal bleeding had the highest PPVs for colon and rectal cancer; dysphagia for esophageal cancer; and abdominal bloating/distension (in women) for ovarian cancer. The highest PPVs of abdominal pain (either sex) and abdominal bloating/distension (men only) were for non-abdominal cancer sites. For the composite outcome of diagnosis of either cancer or IBD, PPVs of rectal bleeding exceeded the National Institute of Health and Care Excellence (NICE)-recommended specialist referral threshold of 3% in all age-sex strata, as did PPVs of abdominal pain, change in bowel habit, and dyspepsia, in those aged 60 years and over. Study limitations include reliance on accuracy and completeness of coding of symptoms and disease outcomes.

Conclusions: Based on evidence from more than 1.9 million patients presenting in primary care, the findings provide estimated PPVs that could be used to guide specialist referral decisions, considering the PPVs of common abdominal symptoms for cancer alongside that for IBD and their composite outcome (cancer or IBD), taking into account the variable PPVs of different abdominal symptoms for different cancers sites. Jointly assessing the risk of cancer or IBD can better support decision-making and prompt diagnosis of both conditions, optimising specialist referrals or investigations, particularly in women.

DOI: <https://libkey.io/10.1371/journal.pmed.1003708>

26. Engagement with community liver disease management across the UK: a cross-sectional survey

Item Type: Journal Article

Authors: Jarvis, Helen;Worsfold, Jonathan;Hebditch, Vanessa and Ryder, Stephen

Publication Date: 2021

Journal: BJGP Open 5(5), pp. 1-8

Abstract: Background: Liver disease is an increasing cause of premature mortality in the UK. Its management in primary care is not well understood. It is unclear what role commissioning bodies are playing in liver disease in the UK.

Aim: To assess the level of engagement with community chronic liver disease management among clinical commissioning groups (CCGs) and health authorities across the UK. **Design & setting:** A cross-sectional survey to all UK CCGs and health authorities.

Method: Survey questions were developed by the British Liver Trust, in collaboration with topic experts, and evaluated structures in place relating to liver disease management at commissioning and health board level. **Results:** There were 159 responses representing 99% UK coverage of CCGs and health boards. Twenty per cent reported an individual responsible for liver disease within their organisation, with 40% and 29% reporting having pathways in place to respond to abnormal liver blood tests and liver disease more generally, respectively. All those reporting use of pathways reported using national guidelines to guide content. Twenty-five per cent made use of transient elastography (FibroScan) and 16% of direct serum fibrosis markers (for example, enhanced liver fibrosis [ELF] score), which are both part of current National Institute for Health and Care Excellence (NICE) guidelines. There was marked regional variation in all areas of engagement surveyed, with Wales having exceptionally high levels of engagement in all areas in contrast to the other nations.

Conclusion: The results of this survey should be used as a catalyst to highlight necessary regional improvements to the primary care management of chronic liver disease across the UK.

DOI: <https://libkey.io/10.3399/BJGPO.2021.0085>

27. Why curative treatment rates are so low for stage I/II Oesophago-gastric cancer in the West of Scotland?-A five year review

Item Type: Journal Article

Authors: Khan, K.;Gall, L.;Miller, G.;Macdonald, A.;Craig, C.;MacKay, C. and Forshaw, M.

Publication Date: 2021

Journal: British Journal of Surgery 108

Abstract: Background: Over the last decade, quality performance indicators (QPIs) have been used to drive improvements in cancer care in Scotland. QPI-11 targets curative treatment rates for oesophago-gastric (OG) cancer and this target has been consistently missed. This study aimed to investigate why patients with potentially curable Stage I and II OG cancer did not receive curative treatment.

Method(s): The West of Scotland MCN database was interrogated for patients with newly diagnosed stage I and II OG cancer between January 2015 and December 2019 to identify those patients who did not have curative treatment. Electronic records were then analyzed and the reason for the non curative treatment recorded.

Result(s): 260 patients (mean age 78.3 +/- 9 years; 114 (43.8%) female) were identified. Median Scottish Index of Multiple Deprivation was 4 (IQR 2-7). There were 159 (61.2%) oesophageal cancers, 196 (75.4%) adenocarcinomas and 174 (66.9%) were Stage II cancers. Formal CPEX fitness was assessed in only 20 patients (7.7%). Reasons for curative treatment not being received were as follows: not clinically fit (n=216 (83.1%)); patient declined curative treatment (n=17 (6.5%)); disease progression (n=16 (6.2%)) and identification of synchronous cancers (n=9 (3.5%)).

Conclusion(s): Lack of fitness for radical treatment is the predominant reason for Stage I and II OG cancer patients in the West of Scotland not being treated with curative intent. This may be related to the previously described 'West of Scotland' effect on health comorbidities.

DOI: <https://libkey.io/https://dx.doi.org/10.1093/bjs/znab430.205>

28. Intravenous or oral antibiotic treatment in adults and children with cystic fibrosis and Pseudomonas aeruginosa infection: the TORPEDO-CF RCT

Item Type: Journal Article

Authors: Langton Hewer, Simon,C.;Smyth, Alan R.;Brown, Michaela;Jones, Ashley P.;Hickey, Helen;Kenna, Dervla;Ashby, Deborah;Thompson, Alexander;Sutton, Laura;Clayton, Danni;Arch, Barbara;Tanajewski, Lukasz;Berdunov, Vladislav and Williamson, Paula R.

Publication Date: 2021

Journal: Health Technology Assessment (Winchester, England) 25(65), pp. 1-128

Abstract: BACKGROUND: People with cystic fibrosis are susceptible to pulmonary infection with Pseudomonas aeruginosa. This may become chronic and lead to increased mortality and morbidity. If treatment is commenced promptly, infection may be eradicated through prolonged antibiotic treatment.,

OBJECTIVE: To compare the clinical effectiveness, cost-effectiveness and safety of two eradication regimens.,

DESIGN: This was a Phase IV, multicentre, parallel-group, randomised controlled trial., SETTING: Seventy UK and two Italian cystic fibrosis centres.,

PARTICIPANTS: Participants were individuals with cystic fibrosis aged > 28 days old who had never had a P. aeruginosa infection or who had been infection free for 1 year.,

INTERVENTIONS: Fourteen days of intravenous ceftazidime and tobramycin or 3 months of oral ciprofloxacin. Inhaled colistimethate sodium was included in both regimens over 3 months. Consenting patients were randomly allocated to either treatment arm in a 1 : 1 ratio using simple block randomisation with random variable block length.,

MAIN OUTCOME MEASURES: The primary outcome was eradication of *P. aeruginosa* at 3 months and remaining free of infection to 15 months. Secondary outcomes included time to reoccurrence, spirometry, anthropometrics, pulmonary exacerbations and hospitalisations. Primary analysis used intention to treat (powered for superiority). Safety analysis included patients who had received at least one dose of any of the study drugs. Cost-effectiveness analysis explored the cost per successful eradication and the cost per quality-adjusted life-year.,

RESULTS: Between 5 October 2010 and 27 January 2017, 286 patients were randomised: 137 patients to intravenous antibiotics and 149 patients to oral antibiotics. The numbers of participants achieving the primary outcome were 55 out of 125 (44%) in the intravenous group and 68 out of 130 (52%) in the oral group. Participants randomised to the intravenous group were less likely to achieve the primary outcome; although the difference between groups was not statistically significant, the clinically important difference that the trial aimed to detect was not contained within the confidence interval (relative risk 0.84, 95% confidence interval 0.65 to 1.09; $p = 0.184$). Significantly fewer patients in the intravenous group (40/129, 31%) than in the oral group (61/136, 44.9%) were hospitalised in the 12 months following eradication treatment (relative risk 0.69, 95% confidence interval 0.5 to 0.95; $p = 0.02$). There were no clinically important differences in other secondary outcomes. There were 32 serious adverse events in 24 participants intravenous: 10/126 (7.9%); oral: 14/146 (9.6%)). Oral therapy led to reductions in costs compared with intravenous therapy (-5938.50, 95% confidence interval -7190.30 to -4686.70). Intravenous therapy usually necessitated hospital admission, which accounted for a large part of this cost.,

LIMITATIONS: Only 15 out of the 286 participants recruited were adults - partly because of the smaller number of adult centres participating in the trial. The possibility that the trial participants may be different from the rest of the cystic fibrosis population and may have had a better clinical status, and so be more likely to agree to the uncertainty of trial participation, cannot be ruled out.,

CONCLUSIONS: Intravenous antibiotics did not achieve sustained eradication of *P. aeruginosa* in a greater proportion of cystic fibrosis patients. Although there were fewer hospitalisations in the intravenous group during follow-up, this confers no advantage over the oral therapy group, as intravenous eradication frequently requires hospitalisation. These results do not support the use of intravenous antibiotics to eradicate *P. aeruginosa* in cystic fibrosis.,

FUTURE WORK: Future research studies should combine long-term follow-up with regimens to reduce reoccurrence after eradication.,

TRIAL REGISTRATION: Current Controlled Trials ISRCTN02734162 and EudraCT 2009-012575-10., **FUNDING:** This project was funded by the National Institute for Health Research (NIHR) Health Technology Assessment programme and will be published in full in Health Technology Assessment; Vol. 25, No. 65. See the NIHR Journals Library website for further project information.

DOI: <https://libkey.io/https://dx.doi.org/10.3310/hta25650>

29. The global NAFLD policy review and preparedness index: Are countries ready to address this silent public health challenge?

Item Type: Journal Article

Authors: Lazarus, Jeffrey V.;Mark, Henry E.;Villota-Rivas, Marcela;Palayew, Adam;Carrieri, Patrizia;Colombo, Massimo;Ekstedt, Mattias;Esmat, Gamal;George, Jacob;Marchesini, Giulio;Novak, Katja;Ocama, Ponsiano;Ratziu, Vlad;Razavi, Homie;Romero-Gomez, Manuel;Silva, Marcelo;Spearman, C. W.;Tacke, Frank;Tsochatzis, Emmanuel A.;Yilmaz, Yusuf, et al

Publication Date: 2021

Journal: Journal of Hepatology

Abstract: BACKGROUND & AIMS: Non-alcoholic fatty liver disease (NAFLD) is a highly prevalent, yet largely underappreciated liver condition which is closely associated with obesity and metabolic disease. Despite affecting an estimated 1 in 4 adults globally, NAFLD is largely absent on national and global health agendas.,

METHODS: We collected data from 102 countries, accounting for 86% of the world population, on NAFLD policies, guidelines, civil society engagement, clinical management, and epidemiologic data. A preparedness index was developed by coding questions into 6 domains (policies, guidelines, civil awareness, epidemiology and data, NAFLD detection, and NAFLD care management) and categorising the responses as high, medium, and low; a multiple correspondence analysis was then applied.,

RESULTS: The highest scoring countries were India (42.7) and the United Kingdom (40.0), with 32 countries (31%) scoring zero out of 100. For 5 of the domains a minority of countries were categorised as high-level while the majority were categorised as low-level. No country had a national or sub-national strategy for NAFLD and <2% of the different strategies for related conditions included any mention of NAFLD. National NAFLD clinical guidelines were present in only 32 countries.,

CONCLUSIONS: Although NAFLD is a pressing public health problem, no country was found to be well prepared to address it. There is a pressing need for strategies to address NAFLD at national and global levels.,

LAY SUMMARY: Around a third of the countries scored a zero on the NAFLD policy preparedness index, with no country scoring over 50/100. Although NAFLD is a pressing public health problem, a comprehensive public health response is lacking in all 102 countries. Policies and strategies to address NAFLD at the national and global levels are urgently needed. Copyright © 2021 The Author(s). Published by Elsevier B.V. All rights reserved.

DOI: <https://libkey.io/https://dx.doi.org/10.1016/j.jhep.2021.10.025>

30. Postoperative adjuvant chemotherapy for resectable cholangiocarcinoma

Item Type: Journal Article

Authors: Luvira, Vor;Satitkarnmanee, Egapong;Pugkhem, Ake;Kietpeerakool, Chumnan;Lumbiganon, Pisake and Pattanittum, Porjai

Publication Date: 2021

Journal: The Cochrane Database of Systematic Reviews 9, pp. CD012814

Abstract: BACKGROUND: Cholangiocarcinoma (cancer in the bile duct) is an aggressive tumour for which surgical resection is a mainstay of treatment. Despite complete resection, recurrences of the cancer are common and lead to poor prognosis in patients. Postoperative adjuvant chemotherapy given after surgical resection may reduce the risk of cancer recurrence by eradicating residual cancer and micrometastatic lesions. The benefits and harms of postoperative adjuvant chemotherapy versus placebo, no intervention, or other adjuvant chemotherapies are unclear.,

OBJECTIVES: To assess the benefits and harms of postoperative adjuvant chemotherapy versus placebo, no intervention, or other adjuvant chemotherapies for people with cholangiocarcinoma after curative-intent resection.,

SEARCH METHODS: We performed electronic searches in the Cochrane Hepato-Biliary Group Controlled Trials Register, Cochrane Central Register of Controlled Trials, MEDLINE, Embase, LILACS, Science Citation Index Expanded, and Conference Proceedings Citation Index - Science for trials that met the inclusion criteria up to 28 April 2021.,

SELECTION CRITERIA: Randomised clinical trials irrespective of blinding, publication status, or language comparing postoperative adjuvant chemotherapy versus placebo, no intervention, or a different postoperative adjuvant chemotherapy regimen for participants with curative-intent resection for cholangiocarcinoma.,

DATA COLLECTION AND ANALYSIS: We used standard Cochrane methods to develop and conduct the review. We conducted meta-analyses and presented results, where feasible, using a random-effects model and risk ratios (RR) with 95% confidence intervals (CI). We assessed risk of bias according to predefined domains suggested by Cochrane. We rated the certainty of evidence using the GRADE approach and presented outcome results in a summary of findings table.,

MAIN RESULTS: We included five published randomised clinical trials. The trials included 931 adults (18 to 83 years old) who underwent curative-intent resection for cholangiocarcinoma. Four trials compared postoperative adjuvant chemotherapy (mitomycin-C and 5-fluorouracil (5-FU); gemcitabine; gemcitabine plus oxaliplatin; or capecitabine) versus no postoperative adjuvant chemotherapy (surgery alone) in 867 participants with cholangiocarcinoma only. A fifth trial compared postoperative adjuvant S-1 (a novel oral fluoropyrimidine derivative) chemotherapy versus gemcitabine in 70 participants with intrahepatic cholangiocarcinoma, perihilar cholangiocarcinoma (64 participants), and gallbladder carcinoma (6 participants). We assessed all of the included trials at overall high risk of bias. One trial was conducted in France, three in Japan, and one in the United Kingdom. We could not perform all planned comparison analyses due to lack of data. Three trials used intention-to-treat analyses. Another trial used per-protocol analysis. In the remaining trial one participant in the intervention group and one in the control group were lost to follow-up. However, the outcomes of these two participants were not described. Postoperative adjuvant chemotherapy versus no postoperative adjuvant chemotherapy We are very uncertain as to whether postoperative adjuvant chemotherapy has little to no effect on all-cause mortality versus no postoperative adjuvant chemotherapy (RR 0.92, 95% CI 0.84 to 1.01; 4 trials, 867 participants, very low-certainty evidence). We are very uncertain of the effect of postoperative adjuvant chemotherapy on serious adverse events (RR 17.82, 95% CI 2.43 to 130.82; 1 trial, 219 participants, very low-certainty evidence). The trial indicated that postoperative adjuvant chemotherapy could increase serious adverse events, as 19/113 (20.5%) of participants developed an adverse event, compared to 1/106 (1.1%) of participants in the no-postoperative adjuvant chemotherapy group. None of the included trials reported data on health-related quality of life, cancer-related mortality, time to recurrence of the tumour, and non-serious adverse events in participants with only cholangiocarcinoma. Adjuvant S-1 chemotherapy (fluoropyrimidine derivative) versus adjuvant gemcitabine-based chemotherapy The only available trial analysed all participants with intrahepatic, perihilar cholangiocarcinoma and gallbladder carcinoma together, with data on participants with cholangiocarcinoma not provided separately. The authors reported that one-year overall mortality after adjuvant S-1 therapy was lower than with adjuvant gemcitabine-based therapy following major hepatectomy for biliary tract cancer. There were no differences in two-year overall mortality., **FUNDING:** two trials received support from drug companies; one trial received funding from the Japan Society of Clinical Oncology; one trial received support from "Programme Hospitalier de Recherche Clinique (PHRC2009) and Ligue Nationale Contre le Cancer"; and one trial did not provide information on support or sponsorship. We identified six ongoing randomised clinical trials.,

AUTHORS' CONCLUSIONS: Based on the very low-certainty evidence found in four trials in people with curative-intent resection for cholangiocarcinoma, we are very uncertain of the effects of postoperative adjuvant chemotherapy (mitomycin-C and 5-FU; gemcitabine; gemcitabine plus oxaliplatin; or capecitabine) versus no postoperative adjuvant chemotherapy on mortality. The effects of postoperative adjuvant chemotherapy

compared with no postoperative adjuvant chemotherapy on serious adverse events are also very uncertain, but the result of the single trial showed 20% higher occurrences of haematologic adverse events. We assessed the certainty of the evidence as very low due to overall high risk of bias, and imprecision. Due to insufficient power of the only identified trial, the best postoperative adjuvant chemotherapy regimen in people with only cholangiocarcinoma could not be established. We also lack randomised clinical trials with outcome data on adjuvant S-1 chemotherapy versus adjuvant gemcitabine-based chemotherapy in people with cholangiocarcinoma alone. There is a need for further randomised clinical trials designed to be at low risk of bias and with adequate sample size exploring the best adjuvant chemotherapy treatment after surgery in people with cholangiocarcinoma. Copyright © 2021 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

DOI: <https://libkey.io/https://dx.doi.org/10.1002/14651858.CD012814.pub2>

31. Knowledge and education to inform evidence-based practice in gastrointestinal nursing: a scoping review

Item Type: Journal Article

Authors: Munnely, Stacey

Publication Date: 2021

Journal: Gastrointestinal Nursing 19(6), pp. 36-45

Abstract: Background: Gastrointestinal (GI) nursing incorporates a plethora of specialisms, involving caring for patients with complex pathologies requiring specialist management and nursing care. GI nurses work across a range of clinical areas and have differing levels of knowledge and skill. However, there are gaps in knowledge specific to GI nursing, and there are barriers to education and evidence-based practice (EBP). Innovative educational strategies and the recent development of competency frameworks, such as those for endoscopy and hepatology nursing, have paved the way for other sub-specialisms, yet the different approaches to upskill the workforce require investigation.

Aims: This article aims to identify the breadth and depth of research regarding the knowledge and educational needs of GI nurses and to understand the best approach to education and EBP.

Methods: A scoping review was performed using the Arksey and O'Malley framework. A search was conducted in two bibliographic databases and across relevant UK organisations. **Findings:** The database search identified 31 relevant papers published from 2010 to 2021. The studies varied in purpose, method and recommendations, but all reported consistent results, specifically that GI nurses' knowledge requires attention. Many ways were proposed to assess learning needs and educational strategies to improve knowledge and EBP. **Conclusion:** GI nurses' knowledge requires development, to improve both the confidence and clinical practice of nurses and the experiences and clinical outcomes of patients. The educational and development requirements of GI nurses vary across a wide spectrum of needs and draw on a vast range of resources and evidence bases. Solutions do not need to be expensive or time consuming and can be practical, making use of existing resources and delivered at local, regional and national levels. At the same time, to deliver true EBP, nurses must develop the critical analysis skills required to locate, appraise and organise evidence, interpreting it into the practicalities for decision making. Future researchers should consider exploration of the instruments used to measure EBP and the competence of GI nurses, to evaluate the effectiveness of different educational models and assist educators in the development and refinement of specialist educational programmes.

DOI: <https://libkey.io/10.12968/gasn.2021.19.6.36>

32. Implementing supportive exercise interventions in the colorectal cancer care pathway: a process evaluation of the PREPARE-ABC randomised controlled trial

Item Type: Journal Article

Authors: Murdoch, Jamie;Varley, Anna;McCulloch, Jane;Jones, Megan;Thomas, Laura B.;Clark, Allan;Stirling, Susan;Turner, David;Swart, Ann Marie;Dresser, Kerry;Howard, Gregory;Saxton, John and Herson, James

Publication Date: 2021

Journal: BMC Cancer 21(1), pp. 1137

Abstract: BACKGROUND: A colorectal resection is standard treatment for patients with colorectal cancer (CRC). However, the procedure results in significant post-operative mortality and reduced quality of life. Maximising pre-operative cardiopulmonary fitness could improve post-surgical outcomes. PREPARE-ABC is a multi-centre, three-armed, randomised controlled trial investigating the effects of exercise interventions, with motivational support on short and longer-term recovery outcomes in CRC patients undergoing major lower-gastrointestinal surgery. The trial included an internal pilot phase with parallel process evaluation. The aim of the process evaluation was to optimise intervention implementation for the main trial.,

METHODS: Mixed methods process evaluation conducted in 14 UK hospitals between November 2016 and March 2018. Data included a site profile questionnaire and telephone scoping interview with hospital staff, 34 qualitative observations of standard care and 14 observations of intervention delivery, 13 semi-structured interviews with healthcare professionals (HCPs) and 28 semi-structured interviews with patients. Data analysis focused on describing intervention delivery within each arm, assessing fidelity, acceptability and how variation in delivery was linked to contextual characteristics.,

RESULTS: Standard care exercise advice was typically limited to maintaining current activity levels, and with lead-in time to surgery affecting whether any exercise advice was provided. Variation in HCP capacity affected the ability of colorectal units to deploy staff to deliver the intervention. Patients' exercise history and motivation prior to surgery influenced HCP perceptions and delivery of the motivational components. Observations indicated a high level of fidelity to delivery of the exercise interventions. All but one of the 28 interviewed patients reported increasing exercise levels as a result of receiving the intervention, with most finding them motivational and greatly valuing the enhanced level of social support (versus standard care) provided by staff.,

CONCLUSION: Hospital-supervised and home-based exercise interventions were highly acceptable for most patients undergoing surgery for CRC. Delivery of pre- and post-operative exercise within the CRC care pathway is feasible but systematic planning of capacity and resources is required to optimise implementation. Copyright © 2021. The Author(s).

DOI: <https://libkey.io/https://dx.doi.org/10.1186/s12885-021-08880-8>

33. Host Response to SARS-CoV2 and Emerging Variants in Pre-Existing Liver and Gastrointestinal Diseases

Item Type: Journal Article

Authors: Nayak, Baibaswata;Lal, Geetanjali;Kumar, Sonu;Das, Chandan J.;Saraya, Anoop and Shalimar

Publication Date: 2021

Journal: *Frontiers in Cellular and Infection Microbiology* 11, pp. 753249

Abstract: Background: Novel coronavirus SARS-CoV2 is evolving continuously with emergence of several variants of increasing transmission capabilities and pandemic potential. Generation of variants occurs through accumulation of mutations due to the RNA nature of viral genome, which is further enhanced by variable selection pressures of this ongoing pandemic. COVID-19 presentations of SARS-CoV2 are mainly pulmonary manifestations with or without mild gastrointestinal (GI) and hepatic symptoms. However, the virus has evolved beyond pulmonary manifestations to multisystem disorder due to systemic inflammation and cytokine storm. Definitive cause of acute or late onset of inflammation, infection in various organs, and host response to emerging variants lacks clarity and needs elucidation. Several studies have reported underlying diseases including diabetes, hypertension, obesity, cardio- and cerebrovascular disorders, and immunocompromised conditions as significant risk factors for severe form of COVID-19. Pre-existing liver and GI diseases are also highly predominant in the population, which can alter COVID-19 outcome due to altered immune status and host response. We aim to review the emerging variants of SARS-CoV2 and host response in patients with pre-existing liver and GI diseases.,

Methods: In this review, we have elucidated the emergence and characteristic features of new SARS-CoV2 variants, mechanisms of infection and host immune response, GI and hepatic manifestation with radiologic features of COVID-19, and outcomes in pre-existing liver and GI diseases.,

Key Findings: Emerging variants of concern (VOC) have shown increased transmissibility and virulence with severe COVID-19 presentation and mortality. There is a drastic swift of variants from the first wave to the next wave of infections with predominated major VOC including alpha (B.1.1.7, UK), beta (B.1.351, South Africa), gamma (B.1.1.28.1, Brazil), and delta (B.1.1.617, India) variants. The mutations in the spike protein of VOC are implicated for increased receptor binding (N501Y, P681R) and immune escape (L452R, E484K/Q, T478K/R) to host response. Pre-existing liver and GI diseases not only have altered tissue expression and distribution of viral entry ACE2 receptor but also host protease TMPRSS2, which is required for both spike protein binding and cleavage to initiate infection. Altered immune status due to pre-existing conditions results in delayed virus clearance or prolonged viremia. Even though GI and hepatic manifestations of SARS-CoV2 are less severe, the detection of virus in patient's stool indicates GI tropism, replication, and shedding from the GI tract. COVID-19-induced liver injury, acute hepatic decompensation, and incidences of acute-on-chronic liver failure may change the disease outcomes.,

Conclusions: The changes in the spike protein of emerging variants, immunomodulation by viral proteins, and altered expression of host viral entry receptor in pre-existing diseases are the key determinants of host response to SARS-CoV2 and its disease outcome. Copyright © 2021 Nayak, Lal, Kumar, Das, Saraya and Shalimar.

DOI: <https://libkey.io/https://dx.doi.org/10.3389/fcimb.2021.753249>

34. Implementation of a care bundle improves the management of patients with non-alcoholic fatty liver disease

Item Type: Journal Article

Authors: Neilson, Laura Jane;Macdougall, Louise;Lee, Phey Shen;Hardy, Timothy;Beaton, David;Chandrapalan, Subashini;Ebraheem, Alaa;Hussien, Mohammed;Galbraith, Sarah;Looi, Shi;Oxenburgh, Sophia;Phaw, Naw April;Taylor, William;Haigh, Laura;Hallsworth, Kate;Mansour, Dina;Dyson, Jessica K.;Masson, Steven;Anstee, Quentin and McPherson, Stuart

Publication Date: 2021

Journal: Frontline Gastroenterology 12(7), pp. 578-585

Abstract: Background: Non-alcoholic fatty liver disease (NAFLD) is common and is associated with liver-related and cardiovascular-related morbidity.

Our aims were: (1) to review the current management of patients with NAFLD attending hospital clinics in North East England (NEE) and assess the variability in care; (2) develop a NAFLD 'care bundle' to standardise care; (3) to assess the impact of implementation of the NAFLD care bundle.,

Methods: A retrospective review was conducted to determine baseline management of patients with NAFLD attending seven hospitals in NEE. A care bundle for the management of NAFLD was developed including important recommendations from international guidelines. Impact of implementation of the bundle was evaluated prospectively in a single centre.,

Results: Baseline management was assessed in 147 patients attending gastroenterology, hepatology and a specialist NAFLD clinic. Overall, there was significant variability in the lifestyle advice given and management of metabolic risk factors, with patients attending an NAFLD clinic significantly more likely to achieve >10% body weight loss and have metabolic risk factors addressed. Following introduction of the NAFLD bundle 50 patients were evaluated. Use of the bundle was associated with significantly better documentation and implementation of most aspects of patient management including management of metabolic risk factors, documented lifestyle advice and provision of NAFLD-specific patient advice booklets.,

Conclusion: The introduction of an outpatient 'care bundle' led to significant improvements in the assessment and management of patients with NAFLD in the NEE and could help improve and standardise care if used more widely. Copyright © Author(s) (or their employer(s)) 2021. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

DOI: <https://libkey.io/https://dx.doi.org/10.1136/flgastro-2020-101480>

35. **Guideline review: British Society of Gastroenterology/UK-PSC guidelines for the diagnosis and management of primary sclerosing cholangitis**

Item Type: Journal Article

Authors: Nicoletti, Alberto;Maurice, James B. and Thorburn, Douglas

Publication Date: 2021

Journal: Frontline Gastroenterology 12(1), pp. 62-66

Abstract: New British Society of Gastroenterology/UK-PSC guidelines have recently discussed the current state-of-the-art on primary sclerosing cholangitis and outlined key elements for the management of this disease. The current lack of effective pharmacological treatments to prevent progression of liver fibrosis to cirrhosis limits our ability to modify the natural history of the disease. However, a personalised approach and structured follow-up could allow earlier diagnosis and management of complications and favour access to liver transplantation, which remains the only available treatment. Our commentary overviews the updates and summarises the key recommendations of the recent guidelines for the management of primary sclerosing cholangitis. Copyright © Author(s) (or their employer(s)) 2021. No commercial re-use. See rights and

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DOI: <https://libkey.io/https://dx.doi.org/10.1136/flgastro-2019-101343>

36. Incidence of chronic kidney disease in Northern Ireland liver transplant recipients-a 10 year retrospective review

Item Type: Journal Article

Authors: O'Kane, R.; Hill, C.; Mc Dougall, N.; Cash, J. and Stratton, L.

Publication Date: 2021a

Journal: United European Gastroenterology Journal 9, pp. 678

Abstract: Introduction: Post-transplant renal dysfunction is one of the most important and common complications experienced by liver transplant (LT) recipients, leading to increased morbidity and mortality. Among all nonrenal solid organ transplant recipients, LT recipients have the second highest incidence of post-LT chronic kidney disease (CKD). 5-year cumulative incidence of end-stage renal disease (ESRD) is reported as 18%-22%. Risk factors include peri-operative events, immunosuppression and metabolic risk factors. There are no specific practice guidelines for CKD identification and management among LT recipients. All LT recipients in Northern Ireland (NI) are followed up in a single centre.

Aims & Methods: Our aim was to review the incidence of CKD, and risk factors for it, in our LT cohort. An electronic database was used to identify all LT recipients in NI over a 10 year period from 2010-2019. Electronic care records were used to collect patient information and laboratory values both pre and post-transplant. Data was analysed for those in whom 1 year follow-up information was available.

Result(s): 218 patients in NI (123 male, 95 female) underwent LT between 1st January 2010 and 31st December 2019. At end of follow-up, 181 patients are alive with a full dataset available. Age ranged from 13 to 71 at time of transplant (mean 44 years old). Complete records are available for 204 patients allowing at least 1 year follow-up. Of these, 13 patients were transplanted as super-urgent fulminant cases, with the rest transplanted on the elective list. 7 patients had known pre-existing CKD- 3 had CKD 3, 1 CKD 4 and 3 CKD 5. 32 patients had hypertension and 43 were diabetic pre-transplant. Post-transplant, 101 patients were hypertensive and 72 were known to be diabetic. At 1 year, 1 patient had CKD 5, 10/204 had CKD and 110/204 patients had CKD 3. 94/204 (46%) had a deterioration by at least 1 CKD stage. Of the 93 patients in whom 5 year data is available, 1 patient had CKD 5 (1.1%), 2 had CKD 4 (2.2%), and 48 had CKD 3 (51.6%). In the past year, 84.5% had a HbA1c test and 34.8% had a urinary albumin:creatinine ratio (ACR). Of the 65 patients alive with diabetes, 56.9% had urinary ACR within the past year. 37 patients (20.4%) are known to renal services. Based on Northern Ireland GAIN guidelines, a further 22 patients (15.3%) meet criteria for routine referral to nephrology based on sustained reduction of >25% eGFR in one year based on recent blood results.

Conclusion(s): Within LT recipients in Northern Ireland, the incidence of ESRD is much lower than quoted in the historical literature (1.1% of current patients with CKD 5 and 2.2% CKD 4). A substantial proportion have CKD 3 (51.6%). 61% of patients have risk factors in addition to calcineurin inhibitors. Care of these patients should include regular monitoring of eGFR and ACR as well as aggressive management of risk factors such as diabetes mellitus and hypertension.

DOI: <https://libkey.io/http://dx.doi.org/10.1002/ueg2.12144>

37. Incidence of chronic kidney disease in Northern Ireland liver transplant recipients-alpha 10 year retrospective review

Item Type: Journal Article

Authors: O'Kane, R.; Hill, C.; Mc Dougall, N.; Cash, J. and Stratton, L.

Publication Date: 2021b

Journal: Gut 70, pp. A11-A12

Abstract: Background and Aims: Post-transplant renal dysfunction is one of the most important and common complications experienced by liver transplant (LT) recipients, leading to increased morbidity and mortality. 5-year cumulative incidence of end-stage renal disease (ESRD) is reported as 18%-22%. Risk factors contributing to this include peri-operative events, immunosuppression and metabolic risk factors. There are no specific practice guidelines for chronic kidney disease (CKD) identification and management among LT recipients. Our aim was to review the incidence of CKD, and risk factors for it, in our LT cohort, who are followed up in a single centre in Northern Ireland (NI).

Method: An electronic database identified all LT recipients in NI over a 10 year period from 2010-2019. Electronic care records were used to collect patient information and relevant laboratory values. Data was analysed for those in whom 1 year follow-up information was available.

Results: 218 patients in NI (123 male, 95 female) underwent LT between 1st January 2010 and 31st December 2019. Age ranged from 13 to 71 at time of transplant (mean 44 years old). Complete records are available for 204 patients allowing at least one year follow-up. 13 patients were transplanted as super-urgent fulminant cases, with the rest transplanted on the elective list. 7 patients had known pre-existing CKD. 32 patients had hypertension and 43 were diabetic pre-transplant. Post-transplant, 101 patients were hypertensive, and 72 were known to be diabetic. At 1 year, 1 patient had CKD 5, 10/204 had CKD and 110/204 patients had CKD 3. 94/204 (46%) had a deterioration by at least 1 CKD stage. Of the 93 patients in whom 5 year data is available, 1 patient had CKD 5 (1.1%), 2 had CKD 4 (2.2%), and 48 had CKD 3 (51.6%). 37 patients (20.4%) are known to renal services. Based on NI GAIN guidelines, a further 22 patients (15.3%) meet criteria for routine referral to nephrology based on sustained reduction of >25% eGFR in one year based on recent blood results.

Conclusion: Within LT recipients in Northern Ireland, the incidence of ESRD is much lower than quoted in the historical literature (1.1% of current patients with CKD 5 and 2.2% CKD 4). A substantial proportion have CKD 3 (51.6%). 61% of patients have risk factors in addition to calcineurin inhibitors. Care of these patients should include regular monitoring of renal function as well as aggressive management of risk factors such as diabetes mellitus and hypertension.

DOI: <https://libkey.io/http://dx.doi.org/10.1136/gutjnl-2021-BASL.21>

38. Review of impact of COVID 19 on hepatocellular carcinomas (HCCs) presented at the Northern Ireland (NI) regional MDM

Item Type: Journal Article

Authors: O'Kane, R. and McDougall, N.

Publication Date: 2021

Journal: Gut 70, pp. A20-A21

Abstract: Introduction: The COVID 19 pandemic has impacted the management of most patients including those with chronic liver disease. HCC usually arises in patients with liver cirrhosis and the Belfast Trust HCC screening program was suspended for 3 months in 2020. Our aim was to assess the number and source of referrals along with treatment outcomes for 2020 compared to 2019.

Methods: The regional HPB MDM database was reviewed to identify all HCC cases during a 12 month period from 1st January 2020. Results were compared with an audit of HPB MDM outcomes from 2019.

Results: 80 patients with HCC were identified, compared to 82 in 2019. There was a reduction in referrals as expected in the second quarter of 2020, as illustrated in the table 1. 12 (15%) patients were detected via HCC screening programme, compared to 19 (23%) in 2019. 36 patients (45%) were offered surgical (6) or radiological (30) therapy in 2020 compared to 32 in 2019. Similar radiological therapy was recommended both years. The main difference in surgical treatment was that only 3 resections were undertaken in 2020, compared to 7 in 2019. In 2020, 2 patients were referred for transplant assessment in November and December 2020 (none referred earlier in year), with 3 referred in 2019. Palliative care was recommended for 44 (55%) patients in 2020, which was similar to 48 (58%) of patients in 2019. In 2020, 10 patients were referred for systemic therapy (17 in 2019). 2 patients received sorafenib compared to 7 the previous year. Of those referred for palliative care, 17 had treatable disease but the patient was not fit for treatment while another 17 had extensive/metastatic disease and so were recommended for supportive care.

Conclusion: COVID 19 may have had an impact on referral patterns and HCC screening programs in 2020. However, the total number of HCC cases referred to the regional HPB MDM in 2020 was as expected and the treatment options recommended were very similar to 2019. The only substantial difference was a reduction in the number of patients who were commenced on systemic therapy. (Table Presented).

DOI: <https://libkey.io/http://dx.doi.org/10.1136/gutjnl-2021-BASL.30>

39. Results of MAVMET, a multi-centre, open-label, 48-week randomised controlled trial of maraviroc with or without metformin for the treatment of non-alcoholic fatty liver disease in HIV-positive virologically suppressed adults

Item Type: Journal Article

Authors: Pett, S.;McCabe, L.;Latifoltojar, A.;Post, F.;Fox, J.;Burns, J.;Pool, E.;Waters, A.;Santana, B.;Garvey, L.;Johnson, M.;McGuinness, I.;Chouhan, M.;Edwards, J.;Goodman, A.;Cooke, G.;Ryder, S.;Sandford, C.;Baker, J.;Angus, B., et al

Publication Date: 2021

Journal: HIV Medicine 22, pp. 43-45

Abstract: Purpose: Persons living with HIV(PLWH) have a high prevalence of non-alcoholic fatty liver disease(NAFLD). Maraviroc, a CCR5-blocker, and metformin, an insulin-sensitiser, are plausible NAFLD treatments.

Method(s): MAVMET, a multi-centre, open-label, 48-week randomised controlled trial with a 2x2 factorial design (maraviroc; metformin; maraviroc+metformin; control) randomised non-diabetic, virologically suppressed PLWH with confirmed/suspected NAFLD. The primary outcome was change in percentage of liver fat measured by Magnetic Resonance Proton Density Fat fraction (MR PDFF) between baseline and week 48. Analyses used linear regression and were adjusted for delays (due to COVID-19) in week-48 scans. Eighty-eight participants gave 80% power to detect a +3 difference in change at the 5% significance level.

Result(s): 90 participants (93% male, 81% White, median age 52 years (IQR 47-57)) were enrolled from 6 UK sites. 70% had scan/biopsy plus ≥ 1 criteria for NAFLD; median liver fat fraction 8.9%; 78% with grade ≤ 1 hepatic steatosis (Table 1). Adherence was similar across arms at each study visit. Primary Outcome: no significant differences in change in liver fat percentage between the four arms (Table 2a). The small decreases (absolute and relative to control) in liver fat percentage with maraviroc and/or metformin (Table 2b) were non-significant. Greater increases in liver fat percentage were seen in those remaining on study drugs for longer (Figure 1). Hepatic steatosis increased, remained unchanged, or decreased in 25%, 68% and 7% respectively. No drug-related serious adverse reactions occurred; 12% (n = 11) reported treatment-limiting toxicity, predominantly low-grade gastrointestinal upset in metformin-containing arms. Significant increases in CD4+ (+80 cells/mm³ (12,166) P = 0.024) and CD8+ (+128 cells/mm³ (20,136) P = 0.021) T-cell counts occurred in the maraviroc+metformin arm vs. control arm. No evidence of an interaction between Maraviroc and Metformin (absolute change, P = 0.67; relative change, P = 0.86). Therefore, participants receiving both drugs are included in both maraviroc vs control and metformin vs control.

Conclusion(s): Among PLWH with suspected NAFLD but without diabetes, baseline liver fat was lower than predicted, and treatment intervention with maraviroc and/or metformin did not reduce liver fat as estimated by MR PDFF.

DOI: <https://libkey.io/http://dx.doi.org/10.1111/hiv.13183>

40. Consensus for the management of pancreatic exocrine insufficiency: UK practical guidelines

Item Type: Journal Article

Authors: Phillips, Mary E.; Hopper, Andrew D.; Leeds, John S.; Roberts, Keith J.; McGeeney, Laura; Duggan, Sinead N. and Kumar, Rajesh

Publication Date: 2021

Journal: BMJ Open Gastroenterology 8(1)

Abstract:

INTRODUCTION: Pancreatic exocrine insufficiency is a finding in many conditions, predominantly affecting those with chronic pancreatitis, pancreatic cancer and acute necrotising pancreatitis. Patients with pancreatic exocrine insufficiency can experience gastrointestinal symptoms, maldigestion, malnutrition and adverse effects on quality of life and even survival. There is a need for readily accessible, pragmatic advice for healthcare professionals on the management of pancreatic exocrine insufficiency.,

METHODS AND ANALYSIS: A review of the literature was conducted by a multidisciplinary panel of experts in pancreatology, and recommendations for clinical practice were produced and the strength of the evidence graded. Consensus voting by 48 pancreatic specialists from across the UK took place at the 2019 Annual Meeting of the Pancreatic Society of Great Britain and Ireland annual scientific meeting.,

RESULTS: Recommendations for clinical practice in the diagnosis, initial management, patient education and long term follow up were developed. All recommendations achieved over 85% consensus and are included within these comprehensive guidelines. Copyright © Author(s) (or their employer(s)) 2021. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

DOI: <https://libkey.io/https://dx.doi.org/10.1136/bmjgast-2021-000643>

41. Nutritional assessment and management in acute pancreatitis: Ongoing lessons of the NCEPOD report

Item Type: Journal Article

Authors: Phillips, Mary E.;Smith, Neil;McPherson, Simon and O'Reilly, Derek,A.

Publication Date: 2021

Journal: Journal of Human Nutrition and Dietetics : The Official Journal of the British Dietetic Association

Abstract: INTRODUCTION: Acute pancreatitis (AP) is a medical emergency that is common, poorly understood and carries a significant risk of death. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) undertook a comprehensive report into the current management of AP in the UK. The study aimed to provide a more detailed analysis of the findings related to nutritional assessment and support.,

METHODS: The data presented here were analysed from the core dataset used in the NCEPOD study. Adult patients admitted between January and June 2014 with a coded diagnosis of AP were included. A clinical and organisational questionnaire was used to collect data and submitted case notes subjected to peer review. Nutritional data, including assessment and provision of support, were analysed.,

RESULTS: One hundred and forty-seven out of 168 (87.5%) hospitals had a nutrition team in place. A screening nutritional assessment was performed in only 67.4% (368/546) of patients. Subsequent referral to a dietitian and nutrition team input occurred in 39% (201/521) and 25% (143/572) of patients, respectively. Supplemental nutrition was considered and used in 240/555 (43.2%) patients. Overall management of the patients' nutrition was considered adequate by the case reviewers in only 281/332 (85%) of cases and by the clinicians in 77% (421/555) of cases.,

CONCLUSIONS: Many patients do not receive adequate nutritional assessment and, in up to 23% of cases, nutritional intervention is not adequate. Pancreatic exocrine insufficiency is likely under recognised and undertreated. Nutritional strategies to support early intervention and to support clinicians outside of tertiary pancreatic centres are warranted. Copyright © 2021 The British Dietetic Association.

DOI: <https://libkey.io/https://dx.doi.org/10.1111/jhn.12968>

42. Oxford's clinical experience in the development of high intensity focused ultrasound therapy

Item Type: Journal Article

Authors: Prachee, Ishika;Wu, Feng and Cranston, David

Publication Date: 2021

Journal: International Journal of Hyperthermia : The Official Journal of European Society for Hyperthermic Oncology, North American Hyperthermia Group 38(2), pp. 81-88

Abstract: High Intensity Focused Ultrasound (HIFU) capably bridges the disciplines of surgery, oncology and biomedical engineering science. It provides the precision associated with a surgical tool whilst remaining a truly non-invasive technique. Oxford has been a centre for both clinical and preclinical research in HIFU over the last twenty years. Research into this technology in the UK has a longer history, with much of the early research being carried out by Professor Gail ter Haar and her team at the Institute of Cancer Research at Sutton in Surrey. A broad range of potential applications have been explored extending from tissue ablation to novel drug delivery. This review presents Oxford's clinical studies and applications for the development of this non-invasive therapy. This includes treatment of solid abdominal tumours comprising those of the liver, kidney, uterus, pancreas, pelvis and prostate. It also briefly introduces preclinical and translational works that are currently being undertaken at the Institute of Biomedical Engineering, University of Oxford. The safety, wide tolerability and effectiveness of this technology is comprehensively demonstrated across these studies. These results can facilitate the incorporation of HIFU as a key clinical management strategy.

DOI: <https://libkey.io/https://dx.doi.org/10.1080/02656736.2021.1899311>

43. The outcomes of emergency hospital admissions with non-malignant upper gastrointestinal bleeding in England between 2003 and 2015

Item Type: Journal Article

Authors: Rees, James;Evison, Felicity;Mytton, Jemma;Patel, Prashant and Trudgill, Nigel

Publication Date: 2021

Journal: Endoscopy 53(12), pp. 1210-1218

Abstract: Background: Upper gastrointestinal bleeding (UGIB) is a common medical emergency with significant mortality. Despite developments in endoscopic and clinical management, only minor improvements in outcomes have been reported.

Methods: This was a retrospective cohort study of patients with non-malignant UGIB emergency admissions in England between 2003 and 2015, using Hospital Episode Statistics. Multilevel logistic regression analysis examined the associations with mortality.

Results: 242 796 patients with an UGIB admission were identified (58.8% men; median age 70 interquartile range (IQR) 53 - 81]). Between 2003 and 2015, falls occurred in both 30-day mortality (7.5% to 7.0%; P 5, OR 2.94, 95%CI 2.85 - 3.04; P 83 years, OR 6.50, 95%CI 6.09 - 6.94; P<0.001), variceal bleeding (OR 2.03, 95%CI 1.89 - 2.18; P<0.001), and a weekend admission (Sunday, OR 1.18, 95%CI 1.12 - 1.23; P<0.001) were associated with 30-day mortality. Of deaths at 30 days, 8.9% were from ischemic heart disease (IHD) and the cardiovascular age-standardized mortality rate following UGIB was high (IHD deaths within 1 year, 1188.4 95%CI 1036.8 - 1353.8] per 100 000 men in 2003).

Conclusions: Between 2003 and 2015, 30-day mortality among emergency admissions with non-malignant UGIB fell by 0.5% to 7.0%. Mortality was higher among UGIB admissions at the weekend, with important implications for service provision. Patients with UGIB had a much greater risk of subsequently dying from cardiovascular disease and addressing this risk is a key management step in UGIB.

DOI: <https://libkey.io/10.1055/a-1330-7118>

44. A high-dose 24-hour tranexamic acid infusion for the treatment of significant gastrointestinal bleeding: HALT-IT RCT

Item Type: Journal Article

Authors: Roberts, Ian;Shakur-Still, Haleema;Afolabi, Adefemi;Akere, Adegboyega;Arribas, Monica;Austin, Emma;Bal, Kiran;Bazeer, Nuha;Beaumont, Danielle;Brenner, Amy;Carrington, Laura;Chaudhri, Rizwana;Coats, Timothy;Gilmore, Ian;Halligan, Kenneth;Hussain, Irshad;Jairath, Vipul;Javaid, Kiran;Kayani, Aasia;Lisman, Ton, et al

Publication Date: 2021

Journal: Health Technology Assessment (Winchester, England) 25(58), pp. 1-86

Abstract: BACKGROUND: Tranexamic acid reduces blood loss in surgery and the risk of death in trauma patients. Meta-analyses of small trials suggest that tranexamic acid decreases the number of deaths from gastrointestinal bleeding, but these meta-analyses are prone to selection bias.,

OBJECTIVE: The trial provides reliable evidence of the effect of tranexamic acid on mortality, rebleeding and complications in significant acute gastrointestinal bleeding.,

DESIGN: A multicentre, randomised, placebo-controlled trial and economic analysis. Patients were assigned by selecting one treatment pack from a box of eight, which were identical apart from the pack number. Patients, caregivers and outcome assessors were masked to allocation. The main analyses were by intention to treat., SETTING: The setting was 164 hospitals in 15 countries, co-ordinated from the London School of Hygiene & Tropical Medicine.,

PARTICIPANTS: Adults with significant upper or lower gastrointestinal bleeding (n = 12,009) were eligible if the responsible clinician was substantially uncertain about whether or not to use tranexamic acid. The clinical diagnosis of significant bleeding implied a risk of bleeding to death, including hypotension, tachycardia or signs of shock, or urgent transfusion, endoscopy or surgery.,

INTERVENTION: Tranexamic acid (a 1-g loading dose over 10 minutes, then a 3-g maintenance dose over 24 hours) or matching placebo.,

MAIN OUTCOME MEASURES: The primary outcome was death due to bleeding within 5 days of randomisation. Secondary outcomes were all-cause and cause-specific mortality; rebleeding; need for endoscopy, surgery or radiological intervention; blood product transfusion; complications; disability; and days spent in intensive care or a high-dependency unit., RESULTS: A total of 12,009 patients were allocated to receive tranexamic acid (n = 5994, 49.9%) or the matching placebo (n = 6015, 50.1%), of whom 11,952 (99.5%) received the first dose. Death due to bleeding within 5 days of randomisation occurred in 222 (3.7%) patients in the tranexamic acid group and in 226 (3.8%) patients in the placebo group (risk ratio 0.99, 95% confidence interval 0.82 to 1.18). Thromboembolic events occurred in 86 (1.4%) patients in the tranexamic acid group and 72 (1.2%) patients in the placebo group (risk ratio 1.20, 95% confidence interval 0.88 to 1.64). The risk of arterial thromboembolic events (myocardial infarction or stroke) was similar in both groups (0.7% in the tranexamic acid group vs. 0.8% in the placebo group; risk ratio 0.92, 95% confidence interval 0.60 to 1.39), but the risk of venous thromboembolic events (deep-vein thrombosis or pulmonary embolism) was higher in tranexamic acid-treated patients than in placebo-treated patients (0.8% vs. 0.4%; risk ratio 1.85, 95% confidence interval 1.15 to 2.98).

Seizures occurred in 38 patients who received tranexamic acid and in 22 patients who received placebo (0.6% vs. 0.4%, respectively; risk ratio 1.73, 95% confidence interval 1.03 to 2.93). In the base-case economic analysis, tranexamic acid was not cost-effective and resulted in slightly poorer health outcomes than no tranexamic acid.,

CONCLUSIONS: Tranexamic acid did not reduce death from gastrointestinal bleeding and, although inexpensive, it is not cost-effective in adults with acute gastrointestinal bleeding.,

FUTURE WORK: These results caution against a uniform approach to the management of patients with major haemorrhage and highlight the need for randomised trials targeted at specific pathophysiological processes.,

LIMITATIONS: Although this is one of the largest randomised trials in gastrointestinal bleeding, we cannot rule out a modest increase or decrease in death due to bleeding with tranexamic acid.,

TRIAL REGISTRATION: Current Controlled Trials ISRCTN11225767, ClinicalTrials.gov NCT01658124 and EudraCT 2012-003192-19.,

FUNDING: This project was funded by the National Institute for Health Research (NIHR) Health Technology Assessment programme and will be published in full in Health Technology Assessment; Vol. 25, No. 58. See the NIHR Journals Library website for further project information.

DOI: <https://libkey.io/https://dx.doi.org/10.3310/hta25580>

45. Differences between current clinical guidelines for screening, diagnosis and management of nonalcoholic fatty liver disease and real-world practice: a targeted literature review

Item Type: Journal Article

Authors: Schattenberg, J. M.;Anstee, Q. M.;Caussy, C.;Bugianesi, E. and Popovic, B.

Publication Date: 2021

Journal: Expert Review of Gastroenterology and Hepatology 15(11), pp. 1253-1266

Abstract: Introduction: Nonalcoholic fatty liver disease (NAFLD) is the most common liver disease and is associated with obesity and metabolic comorbidities. Liver steatosis can progress to nonalcoholic steatohepatitis (NASH) exhibiting a relevant risk of fibrosis and ultimately liver failure. To date, no approved treatment for NASH to reduce its clinical and humanistic burden has been developed. Areas covered: We undertook a literature review to identify English language, national and international clinical guidelines for NAFLD regarding diagnosis, assessment and management, and determined their points of agreement and difference. Additionally, we investigated published literature relating to real-world management of NAFLD and NASH. Expert opinion: National (China, England/Wales, Italy, the USA) and international society (Asia-Pacific, Europe, World Gastroenterology Organization) guidelines were identified and analyzed. All guidelines addressed identifying and diagnosing subjects with likely NAFLD, as well as assessment and management of individuals with risk factors for advanced disease, including fibrosis. Real-world practice reveals widespread suboptimal awareness and implementation of guidelines. In the absence of proven therapeutics, such gaps risk failure to recognize patients in need of specialist care and monitoring, highlighting the need for clear, easy-to-apply care pathways to aid in reducing the clinical and humanistic burden of NAFLD and NASH. Copyright © 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

DOI: <https://libkey.io/http://dx.doi.org/10.1080/17474124.2021.1974295>

46. Differences between current clinical guidelines for screening, diagnosis and management of nonalcoholic fatty liver disease and real-world practice: a targeted literature review

Item Type: Journal Article

Authors: Schattenberg, Jorn M.;Anstee, Quentin M.;Caussy, Cyrielle;Bugianesi, Elisabetta and Popovic, Branko

Publication Date: 2021

Journal: Expert Review of Gastroenterology & Hepatology 15(11), pp. 1253-1266

Abstract: INTRODUCTION: Nonalcoholic fatty liver disease (NAFLD) is the most common liver disease and is associated with obesity and metabolic comorbidities. Liver steatosis can progress to nonalcoholic steatohepatitis (NASH) exhibiting a relevant risk of fibrosis and ultimately liver failure. To date, no approved treatment for NASH to reduce its clinical and humanistic burden has been developed.,

AREAS COVERED: We undertook a literature review to identify English language, national and international clinical guidelines for NAFLD regarding diagnosis, assessment and management, and determined their points of agreement and difference. Additionally, we investigated published literature relating to real-world management of NAFLD and NASH.,

EXPERT OPINION: National (China, England/Wales, Italy, the USA) and international society (Asia-Pacific, Europe, World Gastroenterology Organization) guidelines were identified and analyzed. All guidelines addressed identifying and diagnosing subjects with likely NAFLD, as well as assessment and management of individuals with risk factors for advanced disease, including fibrosis. Real-world practice reveals widespread suboptimal awareness and implementation of guidelines. In the absence of proven therapeutics, such gaps risk failure to recognize patients in need of specialist care and monitoring, highlighting the need for clear, easy-to-apply care pathways to aid in reducing the clinical and humanistic burden of NAFLD and NASH.

DOI: <https://libkey.io/https://dx.doi.org/10.1080/17474124.2021.1974295>

47. Iron replacement therapy with oral ferric maltol: Review of the evidence and expert opinion

Item Type: Journal Article

Authors: Schmidt, C.;Allen, S.;Kopyt, N. and Pergola, P.

Publication Date: 2021

Journal: Journal of Clinical Medicine 10(19), pp. 4448

Abstract: Iron deficiency is the most common cause of anemia globally and is frequently reported in patients with underlying inflammatory conditions, such as inflammatory bowel disease (IBD) and chronic kidney disease (CKD). Ferric maltol is a new oral iron replacement therapy designed to optimize iron absorption while reducing the gastrointestinal adverse events associated with unabsorbed free iron. Ferric maltol has been studied in clinical trials involving almost 750 adults and adolescents with iron-deficiency anemia associated with IBD, CKD, and other underlying conditions, and it has been widely used in clinical practice. It is approved for the treatment of adults with iron deficiency with or without anemia, independent of the underlying condition, and is commercially available in Europe and the United States. We review the published evidence for ferric maltol, which demonstrates consistent and clinically meaningful improvements in hemoglobin and measures of iron availability (ferritin and transferrin saturation) and shows that it is well-tolerated over long-term treatment for up to 64 weeks-an important consideration in patients with chronic underlying conditions such as IBD and CKD.

We believe that ferric maltol is an effective, convenient, and well-tolerated treatment option for iron deficiency and iron-deficiency anemia, especially when long-term management of chronic iron deficiency is required. Writing support was provided by Shield Therapeutics (Gateshead, UK). Copyright © 2021 by the authors. Licensee MDPI, Basel, Switzerland.

DOI: <https://libkey.io/http://dx.doi.org/10.3390/jcm10194448>

48. Acotiamide and Functional Dyspepsia: A Systematic Review and Meta-Analysis

Item Type: Journal Article

Authors: Shrestha, Dhan B.; Budhathoki, Pravash; Subedi, Prarthana; Khadka, Manita; Karki, Prabesh; Sedhai, Yub Raj; Karki, Bhes Raj and Mir, Wasey Ali Yadullahi

Publication Date: 2021

Journal: Cureus 13(12), pp. e20532

Abstract: Functional dyspepsia is a common gastrointestinal disorder characterized by postprandial fullness or early satiety and epigastric burning or pain in the absence of organic disease. Acotiamide is a novel prokinetic motility drug being used in functional dyspepsia. Databases like PubMed, PubMed Central, Embase, and Scopus were searched for studies comparing the use of acotiamide and placebo for people with functional dyspepsia. Quantitative synthesis was performed using RevMan 5.4 (Cochrane, London, United Kingdom). The improvement in symptoms of functional dyspepsia after treatment was higher in people treated with acotiamide than placebo, although not statistically significant (OR, 1.48; 95% CI, 0.93 to 2.35; n = 1697; I² = 59%). Among the commonly reported adverse effects, namely, raised in serum prolactin (OR 1.02, 95% CI 0.64 to 1.61; n = 1709; I² = 44%), raised in alanine transaminase (OR 1.27, 95% CI 0.70 to 2.33; n = 1709; I² = 0%), and raised in serum bilirubin (OR, 0.98; 95% CI, 0.52 to 1.87; I² = 0%) did not differ between two groups. Acotiamide seems to be a promising agent in functional dyspepsia. However, further larger studies are needed to evaluate the role of acotiamide in functional dyspepsia. Copyright © 2021, Shrestha et al.

DOI: <https://libkey.io/https://dx.doi.org/10.7759/cureus.20532>

50. Interventions for the management of abdominal pain in Crohn's disease and inflammatory bowel disease

Item Type: Journal Article

Authors: Sinopoulou, V.; Gordon, M.; Akobeng, A. K.; Gasparetto, M.; Sammaan, M.; Vasiliou, J. and Dovey, TM

Publication Date: 2021

Journal: Cochrane Database of Systematic Reviews (11)

Abstract: Background: Crohn's disease is a remitting and relapsing disorder that can affect the whole gastrointestinal tract. Active disease symptoms include abdominal pain, fatigue, weight loss, and diarrhoea. There is no known cure; however, the disease can be managed, and therefore places a huge financial burden on healthcare systems. Abdominal pain is a common and debilitating symptom of Crohn's and other inflammatory

bowel diseases (IBDs), and is multifaceted. Abdominal pain in Crohn's disease could be a symptom of disease relapse or related to medication adverse effects, surgical complications and strictures or adhesions secondary to IBD. In the absence of these factors, around 20 to 50% of people with Crohn's in remission still experience pain.

Objectives: To assess the efficacy and safety of interventions for managing abdominal pain in people with Crohn's disease and IBD (where data on ulcerative colitis and Crohn's disease could not be separated). **Search methods** We searched CENTRAL, MEDLINE, three other databases, and clinical trials registries on 29 April 2021. We also searched the references of trials and systematic reviews for any additional trials.

Selection criteria: All published, unpublished, and ongoing randomised trials that compared interventions for the management of abdominal pain in the setting of Crohn's disease and IBD, with other active interventions or standard therapy, placebo, or no therapy were included. We excluded studies that did not report on any abdominal pain outcomes. **Data collection and analysis** Five review authors independently conducted data extraction and 'Risk of bias' assessment of the included studies. We analysed data using Review Manager 5. We expressed dichotomous and continuous outcomes as risk ratios and mean differences with 95% confidence intervals. We assessed the certainty of the evidence using GRADE methodology. **Main results** We included 14 studies (743 randomised participants). Five studies evaluated participants with Crohn's disease; seven studies evaluated participants with IBD where the data on ulcerative colitis and Crohn's disease could not be separated; and two studies provided separate results for Crohn's disease participants. Studies considered a range of disease activity states. Two studies provided intervention success definitions, whilst the remaining studies measured pain as a continuous outcome on a rating scale. All studies except one measured pain intensity, whilst three studies measured pain frequency. Withdrawals due to adverse events were directly or indirectly reported in 10 studies. No conclusions could be drawn about the efficacy of the majority of the interventions on pain intensity, pain frequency, and treatment success, except for the comparison of transcranial direct current stimulation to sham stimulation. The certainty of the evidence was very low in all but one comparison because of imprecision due to sparse data and risk of bias assessed as unclear or high risk. Two studies compared a low FODMAP diet (n=37) to a sham diet (n=45) in IBD patients. The evidence on pain intensity was of very low certainty (MD -12.00, 95% CI -114.55 to 90.55). One study reported pain intensity separately for CD participants in the low FODMAP group n=14, mean(SD)=24 (82.3)] and the sham group n=12, mean(SD)=32 (69.3)]. The same study also reported pain frequency for IBD participants in the low FODMAP group n=27, mean(SD)=36 (26)] and sham group n=25, mean(SD)=38(25)] and CD participants in the low FODMAP group n=14, mean(SD)=36 (138.4)] and sham group n=12, mean(SD)=48 (128.2)]. Treatment success was not reported. One study compared a low FODMAP diet (n=25) to high FODMAP/normal diet (n=25) in IBD patients. The data reported on pain intensity was unclear. Treatment success and pain frequency were not reported. One study compared medicine-separated moxibustion combined with acupuncture (n=51) versus wheat bran-separated moxibustion combined with shallow acupuncture (n=51) in CD patients. The data reported on pain intensity and frequency were unclear. Treatment success was not reported. One study compared mindfulness with CBT (n=33) versus no treatment (n=33) in IBD patients. The evidence is very uncertain about the effect of this treatment on pain intensity and frequency (MD -37.00, 95% CI -87.29 to 13.29). Treatment success was not reported. One study compared soft non-manipulative osteopathic treatment (n=16) with no treatment besides doctor advice (n=14) in CD patients. The evidence is very uncertain about the effect of this treatment on pain intensity (MD 0.01, 95% CI -1.81 to 1.83). Treatment success and pain frequency were not reported. One study compared stress management (n=15) to self-directed stress management(n=15) and to standard treatment (n=15) in CD patients. The evidence is very uncertain about the effect of these treatments on pain intensity (MD -30.50, 95% CI -58.45 to -2.55 and MD -34.30, 95% CI -61.99 to -6.61). Treatment success and pain frequency were not reported. One study compared enteric-release glyceryl trinitrate (n=34) with placebo (n=36) in CD patients. The data reported on pain intensity was unclear. Treatment success and pain frequency were not reported. One study compared 100 mg olorinab three times per day (n=8) with 25 mg olorinab three times per day (n=6) in CD patients. Pain intensity was measured as a 30% reduction in weekly average abdominal pain intensity score for the 100mg group (n=5) and the 25mg group (n=6). The evidence is very uncertain about the effect of this treatment on pain intensity (RR 0.66, 95% CI 0.38 to 1.15). Treatment success and pain frequency were not reported. One study compared relaxation training (n=28) to a waitlist (n=28) in IBD patients. The

evidence is very uncertain about the effect of this treatment on pain intensity (MD -0.72, 95% CI -1.85 to 0.41). Treatment success and pain frequency were not reported. One study compared web-based education (n=30) with a book-based education (n=30) in IBD patients. The evidence is very uncertain about the effect of this treatment on pain intensity (MD -0.13, 95% CI -1.25 to 0.99). Treatment success and pain frequency were not reported. One study compared yoga (n=50) with no treatment (n=50) in IBD patients. The data reported on treatment success were unclear. Pain frequency and intensity were not reported. One study compared transcranial direct current stimulation (n = 10) to sham stimulation (n = 10) in IBD patients. There may be an improvement in pain intensity when transcranial direct current is compared to sham stimulation (MD -1.65, 95% CI -3.29 to -0.01, low-certainty evidence). Treatment success and pain frequency were not reported. One study compared a kefir diet (Lactobacillus bacteria) to no intervention in IBD patients and provided separate data for their CD participants. The evidence is very uncertain about the effect of this treatment on pain intensity in IBD (MD 0.62, 95% CI 0.17 to 1.07) and CD (MD -1.10, 95% CI -1.67 to -0.53). Treatment success and pain frequency were not reported. Reporting of our secondary outcomes was inconsistent. The most adverse events were reported in the enteric-release glyceryl trinitrate and olorinab studies. In the enteric-release glyceryl trinitrate study, the adverse events were higher in the intervention arm. In the olorinab study, more adverse events were observed in the higher dose arm of the intervention. In the studies on non-drug interventions, adverse events tended to be very low or zero. However, no clear judgements regarding adverse events can be drawn for any interventions due to the low number of events. Anxiety and depression were measured and reported at the end of intervention in only one study; therefore, no meaningful conclusions can be drawn for this outcome.

Authors' conclusions: We found low certainty evidence that transcranial direct current stimulation may improve pain intensity compared to sham stimulation. We could not reach any conclusions on the efficacy of any other interventions on pain intensity, pain frequency, and treatment success. The certainty of the evidence was very low due to the low numbers of studies and participants in each comparison and clinical heterogeneity amongst the studies. While no serious or total adverse events were elicited explicitly with any of the treatments studied, the reported events were very low. The certainty of the evidence for all comparisons was very low, so no conclusions can be drawn. Plain language summary Treatments for stomach pain in Crohn's disease What is the aim of this review? The aim of this Cochrane Review was to find out whether treatments in people with Crohn's disease can improve stomach pain. We analysed data from 14 studies to answer this question. Key messages Based on low-quality evidence, electrical brain stimulation may improve stomach pain compared to fake brain stimulation. It is unclear whether there is any difference between a low FODMAP (a group of sugars found in food) diet and a diet that is not low in FODMAP in improving stomach pain. It is unclear whether there is any difference between a stress management programme, self-directed stress management, and standard treatment only, in improving stomach pain. We were unable to draw any conclusions about the safety of any of the interventions. It is unclear whether any of the treatments for the other comparisons under study are better or worse than another, as the evidence was limited due to the very low numbers of studies and participants and low quality of the reporting. Further research that addresses the quality issues we have highlighted is needed. What was studied in the review? People with Crohn's disease commonly suffer stomach pain whether their disease is active or inactive. Several types of therapies have been used to try to reduce pain in Crohn's disease, including diets, psychological therapies, alternative therapies, drugs, and exercise therapies. There is currently no agreement amongst healthcare providers as to which therapy is better. What are the main results of the review? We searched for randomised controlled trials (studies in which participants are assigned to one of two or more treatment groups using a random method) comparing any treatment with any other treatment (such as dummy/placebo treatments) in people with Crohn's disease. We found 14 trials including a total of 743 participants who were aged 16 to 80 years old. We made the following conclusions. • Electrical brain stimulation may be better than fake brain stimulation in improving pain, based on low-quality evidence.^[1]• It is unclear whether a low FODMAP diet or a diet that is not low in FODMAP is better in improving pain.^[1]• It is unclear whether a stress management programme, self-directed stress management, or standard treatment only is better in improving pain.^[1]• It is unclear whether there is any difference between any of the other therapies in their effects on the management of pain.^[1]• It is unclear whether any therapy leads to a difference in major and minor side effects. How up-to-date is this review? This review is up-to-date as of April 2021.

DOI: <https://libkey.io/10.1002/14651858.CD013531.pub2>

51. Gastrointestinal manifestations in mucopolysaccharidosis type iii: Review of death certificates and the literature

Item Type: Journal Article

Authors: Thomas, S.;Ramaswami, U.;Cleary, M.;Yaqub, M. and Raebel, E. M.

Publication Date: 2021

Journal: Journal of Clinical Medicine 10(19), pp. 4445

Abstract: Background: Mucopolysaccharidosis type III (MPS III, Sanfilippo disease) is a life-limiting recessive lysosomal storage disorder caused by a deficiency in the enzymes involved in degrading glycosaminoglycan heparan sulfate. MPS III is characterized by progressive deterioration of the central nervous system. Respiratory tract infections have been reported as frequent and as the most common cause of death, but gastrointestinal (GI) manifestations have not been acknowledged as a cause of concern. The aim of this study was to determine the incidence of GI problems as a primary cause of death and to review GI symptoms reported in published studies.

Method(s): Causes of death from 221 UK death certificates (1957-2020) were reviewed and the literature was searched to ascertain reported GI symptoms.

Result(s): GI manifestations were listed in 5.9% (n = 13) of death certificates. Median (IQR) age at death was 16.7 (5.3) years. Causes of death included GI failure, GI bleed, haemorrhagic pancreatitis, perforation due to gastrostomies, paralytic ileus and emaciation. Twenty-one GI conditions were reported in 30 studies, mostly related to functional GI disorders, including diarrhoea, dysphagia, constipation, faecal incontinence, abdominal pain/distension and cachexia.

Conclusion(s): GI manifestations may be an under-recognized but important clinical feature of MPS III. Early recognition of GI symptoms and timely interventions is an important part of the management of MPS III patients. Copyright © 2021 by the authors. Licensee MDPI, Basel, Switzerland.

DOI: <https://libkey.io/http://dx.doi.org/10.3390/jcm10194445>

52. Gastrointestinal Manifestations in Mucopolysaccharidosis Type III: Review of Death Certificates and the Literature

Item Type: Journal Article

Authors: Thomas, Sophie;Ramaswami, Uma;Cleary, Maureen;Yaqub, Medeah and Raebel, Eva M.

Publication Date: 2021

Journal: Journal of Clinical Medicine 10(19)

Abstract: BACKGROUND: Mucopolysaccharidosis type III (MPS III, Sanfilippo disease) is a life-limiting recessive

lysosomal storage disorder caused by a deficiency in the enzymes involved in degrading glycosaminoglycan heparan sulfate. MPS III is characterized by progressive deterioration of the central nervous system. Respiratory tract infections have been reported as frequent and as the most common cause of death, but gastrointestinal (GI) manifestations have not been acknowledged as a cause of concern. The aim of this study was to determine the incidence of GI problems as a primary cause of death and to review GI symptoms reported in published studies.,

METHODS: Causes of death from 221 UK death certificates (1957-2020) were reviewed and the literature was searched to ascertain reported GI symptoms.,

RESULTS: GI manifestations were listed in 5.9% (n = 13) of death certificates. Median (IQR) age at death was 16.7 (5.3) years. Causes of death included GI failure, GI bleed, haemorrhagic pancreatitis, perforation due to gastrostomies, paralytic ileus and emaciation. Twenty-one GI conditions were reported in 30 studies, mostly related to functional GI disorders, including diarrhoea, dysphagia, constipation, faecal incontinence, abdominal pain/distension and cachexia.,

CONCLUSIONS: GI manifestations may be an under-recognized but important clinical feature of MPS III. Early recognition of GI symptoms and timely interventions is an important part of the management of MPS III patients.

DOI: <https://libkey.io/https://dx.doi.org/10.3390/jcm10194445>

53. Endoscopy in patients on antiplatelet or anticoagulant therapy: British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) guideline update

Item Type: Journal Article

Authors: Veitch, Andrew M.;Radaelli, Franco;Alikhan, Raza;Dumonceau, Jean-Marc;Eaton, Diane;Jerrone, Jo;Lester, Will;Nylander, David;Thoufeeq, Mo;Vanbiervliet, Geoffroy;Wilkinson, James R. and van Hooft, Jeanin E.

Publication Date: 2021

Journal: Endoscopy 53(9), pp. 947-969

Abstract: This is a collaboration between the British Society of Gastroenterology (BSG) and the European Society of Gastrointestinal Endoscopy (ESGE), and is a scheduled update of their 2016 guideline on endoscopy in patients on antiplatelet or anticoagulant therapy. The guideline development committee included representatives from the British Society of Haematology, the British Cardiovascular Intervention Society, and two patient representatives from the charities Anticoagulation UK and Thrombosis UK, as well as gastroenterologists. The process conformed to AGREE II principles, and the quality of evidence and strength of recommendations were derived using GRADE methodology. Prior to submission for publication, consultation was made with all member societies of ESGE, including BSG. Evidence-based revisions have been made to the risk categories for endoscopic procedures, and to the categories for risks of thrombosis. In particular a more detailed risk analysis for atrial fibrillation has been employed, and the recommendations for direct oral anticoagulants have been strengthened in light of trial data published since the previous version. A section has been added on the management of patients presenting with acute GI haemorrhage. Important patient considerations are highlighted. Recommendations are based on the risk balance between thrombosis and haemorrhage in given situations.

DOI: <https://libkey.io/10.1055/a-1547-2282>

54. **IL-1 Signal Inhibition In Alcoholic Hepatitis (ISAIAH): a study protocol for a multicentre, randomised, placebo-controlled trial to explore the potential benefits of canakinumab in the treatment of alcoholic hepatitis**

Item Type: Journal Article

Authors: Vergis, N.;Patel, V.;Bogdanowicz, K.;Czyzewska-Khan, J.;Fiorentino, F.;Day, E.;Cross, M.;Foster, N.;Lord, E.;Goldin, R.;Forrest, E. and Thursz, M.

Publication Date: 2021a

Journal: Trials 22(1), pp. 792

Abstract: Background: Alcohol consumption causes a spectrum of liver abnormalities and leads to over 3 million deaths per year. Alcoholic hepatitis (AH) is a florid presentation of alcoholic liver disease characterized by liver failure in the context of recent and heavy alcohol consumption. The aim of this study is to explore the potential benefits of the IL-1beta antibody, canakinumab, in the treatment of AH.

Method(s): This is a multicentre, double-blind, randomised placebo-controlled trial. Participants will be diagnosed with AH using clinical criteria. Liver biopsy will then confirm that all histological features of AH are present. Up to 58 participants will be recruited into two groups from 15 centres in the UK. Patients will receive an infusion of Canakinumab or matched placebo by random 1:1 allocation. The primary outcome is the difference between groups in the proportion of patients demonstrating histological improvement and will compare histological appearances at baseline with appearances at 28 days to assign a category of "improved" or "not improved". Patients with evidence of ongoing disease activity will receive a second infusion of canakinumab or placebo. Participants will be followed up for 90 days. Secondary outcomes include mortality and change in MELD score at 90 days.

Discussion(s): This phase II study will explore the benefits of the IL-1beta antibody, canakinumab, in the treatment of AH to provide proof of concept that inhibition of IL-1beta signalling may improve histology and survival for patients with AH. Trial registration: EudraCT 2017-003724-79. Prospectively registered on 13 April 2018. Copyright © 2021, The Author(s).

DOI: <https://libkey.io/https://dx.doi.org/10.1186/s13063-021-05719-2>

56. **Treatment for gastrointestinal and pancreatic neuroendocrine tumours: a network meta-analysis**

Item Type: Journal Article

Authors: Walter, M. A.;Nesti, C.;Spanjol, M.;Kollár, A.;Bütikofer, L.;Gloy, V. L.;Dumont, R. A.;Seiler, C. A.;Christ, E. R. and Radojewski, P.

Publication Date: 2021

Journal: Cochrane Database of Systematic Reviews (11)

Abstract: Background: Several available therapies for neuroendocrine tumours (NETs) have demonstrated

efficacy in randomised controlled trials. However, translation of these results into improved care faces several challenges, as a direct comparison of the most pertinent therapies is incomplete.

Objectives: To evaluate the safety and efficacy of therapies for NETs, to guide clinical decision-making, and to provide estimates of relative efficiency of the different treatment options (including placebo) and rank the treatments according to their efficiency based on a network meta-analysis.

Search methods: We identified studies through systematic searches of the following bibliographic databases: the Cochrane Central Register of Controlled Trials (CENTRAL) in the Cochrane Library; MEDLINE (Ovid); and Embase from January 1947 to December 2020. In addition, we checked trial registries for ongoing or unpublished eligible trials and manually searched for abstracts from scientific and clinical meetings. Selection criteria We evaluated randomised controlled trials (RCTs) comparing two or more therapies in people with NETs (primarily gastrointestinal and pancreatic).

Data collection and analysis: Two review authors independently selected studies and extracted data to a pre-designed data extraction form. Multi-arm studies were included in the network meta-analysis using the R-package netmeta. We separately analysed two different outcomes (disease control and progression-free survival) and two types of NET (gastrointestinal and pancreatic NET) in four network meta-analyses. A frequentist approach was used to compare the efficacy of therapies.

Main results: We identified 55 studies in 90 records in the qualitative analysis, reporting 39 primary RCTs and 16 subgroup analyses. We included 22 RCTs, with 4299 participants, that reported disease control and/or progression-free survival in the network meta-analysis. Precision-of-treatment estimates and estimated heterogeneity were limited, although the risk of bias was predominantly low. The network meta-analysis of progression-free survival found nine therapies for pancreatic NETs: everolimus (hazard ratio HR], 0.36 95% CI, 0.28 to 0.46]), interferon plus somatostatin analogue (HR, 0.34 95% CI, 0.14 to 0.80]), everolimus plus somatostatin analogue (HR, 0.38 95% CI, 0.26 to 0.57]), bevacizumab plus somatostatin analogue (HR, 0.36 95% CI, 0.15 to 0.89]), interferon (HR, 0.41 95% CI, 0.18 to 0.94]), sunitinib (HR, 0.42 95% CI, 0.26 to 0.67]), everolimus plus bevacizumab plus somatostatin analogue (HR, 0.48 95% CI, 0.28 to 0.83]), surufatinib (HR, 0.49 95% CI, 0.32 to 0.76]), and somatostatin analogue (HR, 0.51 95% CI, 0.34 to 0.77]); and six therapies for gastrointestinal NETs: 177-Lu-DOTATATE plus somatostatin analogue (HR, 0.07 95% CI, 0.02 to 0.26]), everolimus plus somatostatin analogue (HR, 0.12 95%CI, 0.03 to 0.54]), bevacizumab plus somatostatin analogue (HR, 0.18 95% CI, 0.04 to 0.94]), interferon plus somatostatin analogue (HR, 0.23 95% CI, 0.06 to 0.93]), surufatinib (HR, 0.33 95%CI, 0.12 to 0.88]), and somatostatin analogue (HR, 0.34 95% CI, 0.16 to 0.76]), with higher efficacy than placebo. Besides everolimus for pancreatic NETs, the results suggested an overall superiority of combination therapies, including somatostatin analogues. The results indicate that NET therapies have a broad range of risk for adverse events and effects on quality of life, but these were reported inconsistently. Evidence from this network meta-analysis (and underlying RCTs) does not support any particular therapy (or combinations of therapies) with respect to patient-centred outcomes (e.g. overall survival and quality of life).

Authors' conclusions: The findings from this study suggest that a range of efficient therapies with different safety profiles is available for people with NETs. Plain language summary Treatment options for neuroendocrine tumours Review question We reviewed the evidence on safety and efficacy of therapies for neuroendocrine tumours (NETs) in the gastrointestinal tract and the pancreas to provide a ranking of these treatment options. Background NETs are a varied group of rare cancers, which can occur anywhere in the body. However, most neuroendocrine tumours derive from the gastrointestinal tract or the pancreas. There are many types of NETs with different growth rates and symptoms. While some NETs produce excess hormones, others do not release hormones, or not enough to cause symptoms. The treatment options, as well as their combinations and sequencing, depend on the type of tumour, its location, aggressiveness, and whether it produces excess hormones. Until now, no clear recommendations could be given about which NET therapies were the most effective and caused the fewest adverse events. We used statistical methods to compare all therapies with each other based on the available information. Study characteristics We included 22 randomised controlled trials (studies in which participants are randomly assigned to treatment groups), published before 11 December

2020, with a total of 4299 people. There were differences in tumour location (gastrointestinal and pancreatic), tumour type, sample size, treatments, and quality of the research between the studies. Key results This analysis suggests, in general, a superiority of combination therapies, including somatostatin-like medications, in both gastrointestinal and pancreatic NETs. However, in pancreatic NETs, everolimus was the most effective therapy with the highest certainty of evidence compared to the other treatments. Furthermore, the results indicate that NET therapies have a broad range of risk for adverse events and effects on quality of life. Because disease is often advanced at presentation and treatment is often given with the intent to control and shrink disease, rather than be ultimately curative, treatment adverse events and quality of life are key considerations. Quality of evidence We rated the certainty of the evidence as high to low for the different therapies. An overall ranking of the treatments (and combinations) was not possible. In order to make an informed decision, advantages and disadvantages of each therapy, including its risks for adverse events and effects on quality of life, have to be balanced against each other. Evidence from this network meta-analysis (and underlying RCTs) does not support any particular therapy (or combinations of therapies) with respect to patient-centred outcomes (e.g. overall survival and quality of life).

DOI: <https://libkey.io/10.1002/14651858.CD013700.pub2>

57. New dimensions for hospital services and early detection of disease: a Review from the Lancet Commission into liver disease in the UK

Item Type: Journal Article

Authors: Williams, Roger;Alessi, Charles;Alexander, Graeme;Allison, Michael;Aspinall, Richard;Batterham, Rachel L.;Bhala, Neeraj;Day, Natalie;Dhawan, Anil;Drummond, Colin;Ferguson, James;Foster, Graham;Gilmore, Ian;Goldacre, Raphael;Gordon, Harriet;Henn, Clive;Kelly, Deirdre;MacGilchrist, Alastair;McCorry, Roger;McDougall, Neil, et al

Publication Date: 2021

Journal: Lancet (London, England) 397(10286), pp. 1770-1780

Abstract: This Review, in addressing the unacceptably high mortality of patients with liver disease admitted to acute hospitals, reinforces the need for integrated clinical services. The masterplan described is based on regional, geographically sited liver centres, each linked to four to six surrounding district general hospitals-a pattern of care similar to that successfully introduced for stroke services. The plan includes the establishment of a lead and deputy lead clinician in each acute hospital, preferably a hepatologist or gastroenterologist with a special interest in liver disease, who will have prime responsibility for organising the care of admitted patients with liver disease on a 24/7 basis. Essential for the plan is greater access to intensive care units and high-dependency units, in line with the reconfiguration of emergency care due to the COVID-19 pandemic. This Review strongly recommends full implementation of alcohol care teams in hospitals and improved working links with acute medical services. We also endorse recommendations from paediatric liver services to improve overall survival figures by diagnosing biliary atresia earlier based on stool colour charts and better caring for patients with impaired cognitive ability and developmental mental health problems. Pilot studies of earlier diagnosis have shown encouraging progress, with 5-6% of previously undiagnosed cases of severe fibrosis or cirrhosis identified through use of a portable FibroScan in primary care. Similar approaches to the detection of early asymptomatic disease are described in accounts from the devolved nations, and the potential of digital technology in improving the value of clinical consultation and screening programmes in primary care is highlighted. The striking contribution of comorbidities, particularly obesity and diabetes (with excess alcohol consumption known to be a major factor in obesity), to mortality in COVID-19 reinforces the need for fiscal and other long delayed regulatory measures to reduce the prevalence of obesity. These measures include the food

sugar levy and the introduction of the minimum unit price policy to reduce alcohol consumption. Improving public health, this Review emphasises, will not only mitigate the severity of further waves of COVID-19, but is crucial to reducing the unacceptable burden from liver disease in the UK. Copyright © 2021 Elsevier Ltd. All rights reserved.

DOI: [https://libkey.io/https://dx.doi.org/10.1016/S0140-6736\(20\)32396-5](https://libkey.io/https://dx.doi.org/10.1016/S0140-6736(20)32396-5)

58. Acute Pancreatitis During COVID-19 Pandemic: An Overview of Patient Demographics, Disease Severity, Management and Outcomes in an Acute District Hospital in Northern Ireland

Item Type: Journal Article

Authors: Yawar, Bakhat;Marzouk, Ahmed;Ali, Heba;Asim, Ayeisha;Ghorab, Tamer;Bahli, Zahid;Abousamra, Mohammad and Fleville, Samara

Publication Date: 2021

Journal: Cureus 13(10), pp. e18520

Abstract:

Background: Acute pancreatitis (AP) is a common disease requiring admissions under surgical and critical care units. The two most common causes are alcohol and gallstones. Coronavirus disease 2019 (COVID-19) pandemic had a significant impact on service delivery and patient management throughout all surgical specialties. In this study, the primary aim was to ascertain the incidence of COVID-19 in acute pancreatitis patients. Secondary objectives were to study aetiology, demographics, severity, 30-day mortality, outcomes and management of acute pancreatitis patients from 1st March, 2020 till 31st August, 2020.

Methods: A retrospective observational review of all patients admitted under the General Surgical team was performed. Information regarding demographics, severity of AP (using Glasgow score, Atlanta classification and CT severity index score), ICU admission and organ support, treatment modalities and follow-up data for outcomes was collected based on data collection tool used by COVID-PAN study and results were compared to outcomes results of COVID-PAN study. Results Forty-three (43) patients were admitted with AP. Only one patient (2.3%) was diagnosed with COVID-19 at the time of pancreatitis. Gallstones were noted to be the most common cause of AP in our population. Mortality was 7% (3 patients). Five patients (11%) needed ITU admission due to organ dysfunction. Three patients (7%) developed ARDS.

Conclusion: The overall incidence of COVID-19 in pancreatitis in our population of the study was low. The incidence of COVID-19 during the first wave in Derry/Londonderry area was low and this may explain why the incidence was low in our study as well. Patients with AP in our target population were mostly elderly, one in five had moderate to severe or severe pancreatitis and in 16.3% the aetiology could not be identified. As observed in other centres globally, urgent cholecystectomy for gallstone pancreatitis faced significant delays with no patients being offered index cholecystectomy and only 4 out of 19 patients having undergone interval cholecystectomy within six months of index admission for gallstone pancreatitis in our centre. Copyright © 2021, Yawar et al.

DOI: <https://libkey.io/https://dx.doi.org/10.7759/cureus.18520>

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