

Hand therapy and COVID Update



16 September 2021

Welcome to the latest copy of the Hand Therapy and COVID 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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Papers selected from Medline, CINHAL and Embase (Aug 2020-July 2021) most recent first

1. Treatment-resistant acute upper limb ischemia in a patient with Systemic Lupus Erythematosus and concomitant SARS-CoV-2 infection: a case report.
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23. The impact of COVID-19 on hand therapy practice.
24. Axillary artery thrombosis resulting in upper limb amputation as a COVID-19 sequela.
25. Assessment of musculoskeletal pain, fatigue and grip strength in hospitalized patients with COVID-19.
26. Case Report: Multiple Strokes and Digital Ischemia in a Young COVID-19 Patient.
27. The impact of COVID-19 on shoulder and elbow trauma in a skeletally immature population: an Italian survey.
28. Pediatric COVID toes and fingers
29. No credible evidence for links between 2D:4D and COVID-19 outcomes: A probabilistic perspective on digit ratio, ACE variants, and national case fatalities
30. Upper Extremity Arterial Thromboembolism in a Coronavirus Patient. A Case Report
31. How hand and wrist trauma has changed during covid-19 emergency in Italy: Incidence and distribution of acute injuries. What to learn?
32. Service reconfiguration in the department of hand surgery during the UK COVID-19 lockdown: Birmingham experience.
33. Acute upper limb ischemia as the first manifestation in a patient with COVID-19.
34. Acute limb ischemia as sole initial manifestation of SARS-CoV-2 infection.
35. A protocol for wide awake local anaesthetic no tourniquet (WALANT) hand surgery in the context of the coronavirus disease 2019 (COVID-19) pandemic.
36. Movement disorders as a new neurological clinical picture in severe SARS-CoV-2 infection
37. Increased rates of hand ischemia following arterial cannulation in patients with severe COVID19-related pneumonia.
38. Acute Upper Limb Ischemia Due To Arterial Thrombosis in a Mild COVID-19 Patient: A Case Report.
39. Guillain-Barré syndrome presenting with COVID-19 infection.



1. Treatment-resistant acute upper limb ischemia in a patient with Systemic Lupus Erythematosus and concomitant SARS-CoV-2 infection: a case report.

Author(s): Nespoli, Martina; Sirignano, Pasqualino; Fermani, Nicoletta; Battocchio, Cesare; Tosti, Filomena; Pranteda, Chiara; Taurino, Maurizio

Source: Annals of vascular surgery; Jun 2021

Publication Date: Jun 2021

Publication Type(s): Case Reports

PubMedID: 34182111

Available at [Annals of vascular surgery](#) - from Unpaywall

Abstract: To describe the case of a young female patient, affected by Systemic Lupus Erythematosus, hospitalized for severe SARS-CoV-2 infection pneumonia and presenting a treatment-resistant acute upper limb ischemia. Two days after hospital admission, the patient suffered sudden right upper limb pain associated with mild functional impairment. At physical examination, radial and ulnar pulses were absent, and no flow signal was detected at duplex ultrasound scan. Therefore, an acute limb ischemia diagnoses was posed. Despite several surgical and endovascular revascularization attempts, the patient underwent an above the elbow amputation in 10th postoperative day from first surgical embolectomy, and she died for respiratory failure 25 days after hospitalization. Our case of acute upper limb ischemia seems to confirm that clinical manifestation and fate of thrombotic disorder in COVID-19 patients could be precipitated by concomitant autoimmune diseases.

Database: Medline

2. Acute upper limb arterial ischemia in patients diagnosed with COVID-19: case series.

Author(s): Rosa, Felipe Damascena; Burihan, Marcelo Calil; Simões, Alexandra Aparecida; Abdala, João Paulo de Souza; Barros, Orlando da Costa; Nasser, Felipe

Source: Jornal vascular brasileiro; Jun 2021; vol. 20 ; p. e20200234

Publication Date: Jun 2021

Publication Type(s): Case Reports

PubMedID: 34211540

Available at [Jornal Vascular Brasileiro](#) - from Unpaywall

Abstract: Infection by coronavirus 2, cause of the severe acute respiratory syndrome (SARS-CoV-2) in humans, was detected for the first time in Wuhan, China, in 2019, and spread globally over the course of 2020. Its different clinical manifestations are challenging, with a wide spectrum of presentations, ranging from asymptomatic infections to severe forms that can result in death. The objective of this study is to describe a series of four cases of acute arterial ischemia involving the upper limbs in patients diagnosed with COVID-19, which were managed clinically with anticoagulation, platelet antiaggregation, and prostacyclins. Two patients were discharged from hospital with regression and delimitation of the ischemic zone, without needing surgical intervention, while two patients died from pulmonary complications. Adequate understanding of the pathophysiology of this disease could support better clinical management of its complications.

Database: Medline

3. Virtual assessments of knee and wrist joint range motion have comparable reliability with face-to-face assessments.

Author(s): Mehta, Saurabh P; Kendall, Kaitlyn M; Reasor, Charlotte M

Source: Musculoskeletal care; Jun 2021; vol. 19 (no. 2); p. 208-216

Publication Date: Jun 2021

Publication Type(s): Journal Article



PubMedID: 33107154

Available at [Musculoskeletal care](#) - from Wiley Online Library

Abstract: BACKGROUND: There has been increased usage of virtual telerehabilitation approach during the COVID-19 pandemic. It is crucial to establish reliability of conducting virtual assessments for musculoskeletal conditions.

OBJECTIVES: This research determined the intra- and interrater reliability of measuring knee and wrist range of motion (ROM) assessed virtually and obtained face-to-face (F2F) using a goniometer (UG) for a student and an experienced examiner.

METHOD: Knee and wrist joint ROM for 54 healthy participants was assessed virtually and F2F by a student examiner and an experienced physical therapist. Intra- (virtual vs. UG assessment) and inter-rater (virtual or UG assessment between examiners) reliabilities were examined for all ROM using Intraclass correlation coefficient (ICC). The ICC values were considered good (>0.75) or excellent (>0.90). Bland and Altman plots determined the limits of agreement (LOA) in assessing joint ROM.

RESULTS/FINDINGS: Student examiner had good reliability in virtually estimating knee extension (ICC = 0.79), wrist flexion (ICC = 0.82) and wrist extension (ICC = 0.78), whereas the experienced examiner had excellent reliability in virtually estimating all knee and wrist ROM (ICC > 0.90). The LOA in assessing knee and wrist ROM for the student examiner were wider indicating higher disagreement between virtual and UG-obtained ROM in some cases.

CONCLUSIONS: Virtual estimation of knee and wrist ROM is a reliable technique, however experience level impacts the precision of measurement. It is suggested that the same examiner conducts all the ROM assessments throughout the clinical course of a patient receiving virtual interventions for knee or wrist pathologies.

Database: Medline

4. Pain, Swelling and Blue Discoloration of Right Hand in a COVID-19 Patient.

Author(s): Avdeev, Sergey N; Nekludova, Galina V; Tsareva, Natalia A; Yaroshetskiy, Andrey I; Merzhoeva, Zamira M; Nuralieva, Galia S; Trushenko, Natalia V

Source: Annals of emergency medicine; Jun 2021; vol. 77 (no. 6); p. 650-657

Publication Date: Jun 2021

Publication Type(s): Case Reports Journal Article

PubMedID: 34030779

Available at [Annals of emergency medicine](#) - from Unpaywall

Database: Medline

5. Acute upper extremity ischemia and symptomatic popliteal artery aneurysm secondary to coronavirus disease 2019

Author(s): Kasirajan K.

Source: Journal of Vascular Surgery Cases and Innovative Techniques; Jun 2021; vol. 7 (no. 2); p. 267-270

Publication Date: Jun 2021

Publication Type(s): Article

Available at [Journal of vascular surgery cases and innovative techniques](#) - from Unpaywall

Abstract: We report the cases of two patients with coronavirus disease 2019 (COVID-19). One patient had presented with acute right upper extremity ischemia (axillary artery thrombosis) and one patient with a symptomatic popliteal artery aneurysm (7.5 x 7.2 cm). Both patients had tested positive for COVID-19 but had no systemic symptoms. The patients were successfully treated using percutaneous techniques and subsequently discharged with oral anticoagulation therapy. A review of the pathogenesis of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)-related arterial thrombosis and aneurysmal disease was performed and discussed. Copyright © 2021 The Author(s)



Database: EMBASE

6. Injury patterns of patients with upper limb and hand trauma sustained during the COVID-19 pandemic lockdown in the UK: a retrospective cohort study.

Author(s): Pidgeon, T E; Parthiban, S; Malone, P; Foster, M; Chester, D L

Source: Hand surgery & rehabilitation; Jun 2021; vol. 40 (no. 3); p. 235-240

Publication Date: Jun 2021

Publication Type(s): Journal Article

PubMedID: 33713858

Available at [Hand surgery & rehabilitation](#) - from Unpaywall

Abstract: This work aimed to identify the lead causes of upper limb injury presenting to a busy hand and major trauma unit during the UK COVID-19 domestic lockdown period, in comparison to a cohort from the same period one year previously. Hand and upper limb injuries presenting to the host organization during a pre-lockdown period (23rd March 2019-11th May 2019) and the formal UK lockdown period (23rd March 2020-11th May 2020) were compared, using data collated from the host institution's hand surgery database. The UK lockdown period was associated with a 52% fall in the number of patients presenting to the service with hand and upper limb injuries (589 pre-lockdown vs. 284 during lockdown). There was a significant increase in the proportion of injuries due to machinery use during lockdown (38, 6.5% pre-lockdown vs. 33, 11.6% during lockdown, $P = 0.009$), other etiologies were consistent. The proportion requiring surgical management were similar ($n = 272$, 46.2% pre-lockdown vs. $n = 138$, 48.6% during lockdown, $P = 0.50$). The proportion requiring overnight admission fell ($n = 94$, 16.0% pre-lockdown vs. 29, 10.2% during lockdown, $P = 0.022$). COVID-19 related lockdown in the UK resulted in a reduction in the presenting numbers of hand related injuries; however almost half of these patients still required surgery. These data may be of use to other hand surgery centers for resource planning during future lockdown periods, and for injury prevention strategies in the post-COVID-19 world.

Database: Medline

7. Hand surgery during the COVID-19 pandemic: Clinical care best practices.

Author(s): Bartoletta, J J; Rhee, P C

Source: Hand surgery & rehabilitation; Jun 2021

Publication Date: Jun 2021

Publication Type(s): Journal Article

PubMedID: 34082157

Available at [Hand surgery & rehabilitation](#) - from Unpaywall

Abstract: We aimed to evaluate the effectiveness of a single institution's hand surgery clinical care guidelines at preventing the transmission of COVID-19. This is an anonymous survey study distributed to all employees within the division of hand surgery at a single quaternary-care academic medical facility. The primary outcome measure was the result of their employee surveillance and/or symptom initiated COVID-19 antibody (prior transmission) or polymerase chain reaction test (active infection) after institution of a COVID-19 exposure and transmission mitigating clinical care protocol. Employees were also asked multiple questions regarding their perceived and actual risk of exposure to COVID-19 while performing their clinical duties. Fifty-five of 69 (79.7%) hand clinic personnel employed during the COVID-19 surge from March 23, 2020 to May 18, 2020 (therapist: 15/19; consulting physicians: 11/16, nurses: 10/11; hand surgery residents: 6/6; hand surgery fellows: 4/5; physician assistant/nurse practitioners: 4/7; clinical desk operations specialists 3/4) responded to the survey. Forty-two employees were tested and all were negative for COVID-19 antibodies (42/42). Seventeen (17/55, 30.9%) employees had a known exposure to COVID-19 of which 13 of the 17 (76.5%) were from patients. Ten of these 17 (58.8%) employees were tested for COVID-19 antibodies and were negative. Twenty four of the 55 (43.6%) respondents felt they were at high risk for transmission



of COVID-19. These data support ongoing care of emergent and urgent hand surgery patients during the COVID-19 surge and safe operation of an elective hand surgery practice amidst the ongoing pandemic through a multimodal approach.

Database: Medline

8. Polyneuropathy following COVID-19 infection: the rehabilitation approach.

Author(s): Saif, Ahmad; Pick, Anton

Source: BMJ case reports; May 2021; vol. 14 (no. 5)

Publication Date: May 2021

Publication Type(s): Case Reports Journal Article

PubMedID: 34031091

Available at [BMJ Case Reports](#) - from BMJ Journals

Available at [BMJ Case Reports](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMJ Case Reports](#) - from Unpaywall

Abstract: A range of neurological manifestations associated with COVID-19 have been reported in the literature, but the pathogenesis of these have yet to be fully explained. The majority of cases of peripheral nervous system disease published thus far have shown a symmetrical pattern. In contrast, we describe the case of a patient with asymmetrical predominantly upper-limb sensorimotor polyneuropathy following COVID-19 infection, likely due to a multifactorial pathological process involving critical illness neuropathy, mechanical injury and inflammatory disease. His presentation, management and recovery contribute to the understanding of this complex condition and informs rehabilitation approaches.

Database: Medline

9. A Probable Covid-19 Case Presented with Acute Upper Limb Ischemia.

Author(s): Erkul, Gulen Sezer Alptekin; Erkul, Sinan; Parlar, Ali Ihsan; Cekirdekci, Ahmet

Source: Annals of vascular surgery; May 2021

Publication Date: May 2021

Publication Type(s): Case Reports

PubMedID: 33992721

Available at [Annals of vascular surgery](#) - from Unpaywall

Abstract: The arterial revascularization procedure is still a challenging issue in Covid-19 associated limb ischemia. Herein we aimed to present a case of a 64 year-old woman with acute ischemic signs in upper extremity who was diagnosed as a probable Covid-19 case incidentally after admission. Although late admission and failed recurrent embolectomies lead to an eventful course, intra-arterial thrombolysis seemed to present a benefitable treatment option for our patient.

Database: Medline

10. Upper-Extremity Phlegmasia Cerulea Dolens with Compartment Syndrome in Coronavirus Disease 2019 Sepsis.

Author(s): Hembd, Austin; Kim, Hannah; Lahsaei, Peiman; Haddock, Nicholas T; Teotia, Sumeet S

Source: The Journal of hand surgery; May 2021

Publication Date: May 2021

Publication Type(s): Case Reports



PubMedID: 34127316

Available at [The Journal of hand surgery](#) - from Unpaywall

Abstract: A 54-year-old woman with leukemia presented with coronavirus disease 2019 and a right upper-extremity indwelling peripherally inserted central catheter line for chemotherapy administration. On hospital admission day 9, she developed acute right upper-extremity edema and pain. Ultrasound demonstrated complete superficial and deep venous thrombosis up to the proximal subclavian vein. Her examination result was consistent with acute phlegmasia cerulea dolens and compartment syndrome, but respiratory instability prevented transfer and vascular surgery intervention. Instead, we performed bedside fasciotomies and administered therapeutic heparin, and the limb was salvaged. This case underscores the potential for successful limb salvage in patients with phlegmasia in the setting of coronavirus disease 2019 via compartment release and therapeutic anticoagulation.

Database: Medline

11. A case of rapidly progressive upper limb ischemic necrosis in a patient with COVID-19.

Author(s): Makhoul, Kamal; Shukha, Yousef; Hanna, Lana Abu; Nitecki, Samy; Leiderman, Maxim; Hayek, Tony; Hamoud, Shadi

Source: International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases; May 2021; vol. 106 ; p. 401-404

Publication Date: May 2021

Publication Type(s): Case Reports Journal Article

PubMedID: 33862207

Available at [International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases](#) - from Unpaywall

Abstract:

BACKGROUND: For more than a year, health systems all over the world have been combating the global coronavirus disease 2019 (COVID-19) pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease was first described in the city of Wuhan in China, presenting as an atypical infection of the lower respiratory tract.

METHODS: COVID-19 is characterized by multisystemic involvement, and mortality is attributed mainly to the respiratory system involvement, which may lead to severe acute respiratory distress syndrome and respiratory failure. Several COVID-19-associated complications are being increasingly reported, including arterial and venous thromboembolic events that may lead to amputation of the affected limbs. So far, a large number of reports have described hypercoagulability crises leading to amputation of the lower limbs. However, a search of the National Library of Medicine (MEDLINE) revealed no cases of urgent upper limb amputation in COVID-19 patients.

RESULTS: This article describes a novel case of upper limb ischemia in a COVID-19 patient, with rapid progression to hand necrosis, requiring urgent through-arm amputation of the upper limb.

CONCLUSIONS: This case emphasizes the need for anticoagulant therapy in COVID-19 patients and to maintain a constant awareness of the possible thromboembolic COVID-19-related sequelae.

Database: Medline

12. Upper Limb Function in Survivors of COVID-19 Requiring Mechanical Ventilation

Author(s): Lovage S.; Doughty R.; Mehta B.; Hudson A.; Finney L.; Singh S.; Man W.

Source: American Journal of Respiratory and Critical Care Medicine; May 2021; vol. 203 (no. 9)

Publication Date: May 2021

Publication Type(s): Conference Abstract

Abstract:



Rationale: Upper limb dysfunction is well recognised in survivors of intensive care (Gustafson et al Crit Care Med 2018; 46:1769-1774). A mainstay of respiratory support through the COVID-19 pandemic has been use of repeated patient prone positioning to improve ventilation. Potential complications reported with prone positioning of sedated patients include brachial plexopathy, shoulder subluxation and peripheral nerve injury. We hypothesised that there would be a high prevalence of upper limb dysfunction, disability and pain in survivors of COVID-19 requiring mechanical ventilation, particularly in those who were prone positioned.

Methods: Eligible patients were laboratory-confirmed swab positive for SARS-CoV-2, mechanically ventilated for a minimum of 72 hours on the Royal Brompton Hospital Adult Intensive Care Units. We measured handgrip strength (HGS), normalised for age and sex, the Disability of Arm Shoulder Hand (DASH) questionnaire (Beaton et al J Hand Ther 2001; 14:128-146) and Upper limb Pain Numerical Rating Scale (from 0-10). Health related quality of life was measured using the EuroQol-5 dimensions 5-level (EQ5D5L Utility Index (UI) and Visual Analogue Score (VAS)). Patients were stratified according to whether they received prone positioning or not.

Results: Twenty-seven consecutive patients were assessed at mean 45 days after hospital discharge. Baseline demographics, admission characteristics, and follow-up upper limb assessment data are shown in Table 1. There was evidence of upper limb weakness (mean (SD) right HGS: 44.77(19.31) %predicted; left HGS 47.69 (18.41) %predicted), with 63% showing upper limb dysfunction (DASH \geq 16) and 33% showing severe upper limb dysfunction (DASH \geq 40). Median (IQR) pain scores were 4 (0.75-6.25) with 53% reporting severe pain (\geq 5). DASH correlated significantly with EQ5D5L UI and VAS ($r=-0.69$ and $r=-0.73$ respectively; both $p<0.001$). No significant differences in upper limb parameters were seen between patients who did or did not receive prone positioning.

Database: EMBASE

13. Mortality and pulmonary complications in patients undergoing upper extremity surgery at the peak of the SARSCoV-2 pandemic in the UK: A national cohort study presented on behalf of the corona hands collaborative

Author(s): Dean B.; Duncan J.

Source: British Journal of Surgery; May 2021; vol. 108

Publication Date: May 2021

Publication Type(s): Conference Abstract

Available at [British Journal of Surgery](#) - from Unpaywall

Abstract:

Introduction: This study reports the 30-day mortality, SARS-CoV-2 complication rate and SARS-CoV-2 related hospital processes at the peak of the first wave of the pandemic in the UK.

Method(s): This national, multicentre, cohort study at 74 centres in the UK included all patients undergoing any surgery below the elbow at the peak of the UK pandemic. The primary outcome measure was 30-day postoperative mortality and was assessed in all enrolled patients.

Result(s): This analysis includes 1093 patients who underwent upper limb surgery from the 1st to the 14th of April 2020. The overall 30-day mortality was 0.09% and the mortality of day case surgery was zero. The SARS-CoV-2 complication rate was 0.18% (2 pneumonias) and the overall complication rate 6.6% (72 patients). Both SARS-CoV-2 related complications occurred in patients who had been hospitalised for a prolonged period before their surgery and a total of 19 patients (1.7%) were SARS-CoV-2 positive.

Conclusion(s): The SARS-CoV-2 related complication rate for upper limb surgery even at the peak of the UK pandemic was low at 0.18% and the mortality was zero for patients admitted on the day of surgery. Urgent surgery should not be delayed pending the results of SARS-CoV-2 testing.

Database: EMBASE

14. Hand Trauma Virtual Clinics Prove Effective During the COVID-19 Pandemic.

Author(s): Popova, Dardan; Young, Kieron; Hobday, Dorian; Welman, Ted; Pahal, Gurjinderpal S



Source: Hand (New York, N.Y.); May 2021 ; p. 15589447211017210

Publication Date: May 2021

Publication Type(s): Journal Article

PubMedID: 34053322

Abstract:

BACKGROUND: Due to the devastating and far-reaching impact of the novel COVID-19 pandemic, hospital resources have been redirected to protect patients and health care staff, thereby vastly reducing the capacity for outpatient follow-up within a busy Plastic Surgery and Hand Trauma center. Through the use of telephone and video technology, virtual clinics were rapidly introduced to reduce hospital footfall.

METHODS: This retrospective cohort study analyzed patient experiences in virtual and traditional face-to-face clinics through the month of April 2020, from the second week of the government-imposed lockdown. A 5-point Visit-Specific Satisfaction Questionnaire was used to subsequently collect patients' feedback regarding their appointments.

RESULTS: A total of 107 hand injury-related follow-up appointments were recorded during the 4-week period. Sixty (56.0%) appointments were performed as a virtual consultation, and 47 (43.9%) face-to-face consultations were carried out on site. It was possible to discharge 43.3% from the virtual clinic group and 57.4% from the face-to-face group. We identified no significant difference in patient satisfaction ($P = .368$, Mann-Whitney U test) between the 2 cohorts.

CONCLUSION: Virtual clinics appear to be safe and effective for the follow-up of patients with traumatic hand injuries during the COVID-19 pandemic. This approach may prove beneficial in terms of workforce organization, reducing waiting times, and providing an alternative for patients unable to attend physical appointments.

Database: Medline

15. Mortality and pulmonary complications in patients undergoing upper extremity surgery at the peak of the SARS-CoV-2 pandemic in the UK: a national cohort study.

Author(s): Floyd Dean

Source: BMJ Quality & Safety; Apr 2021; vol. 30 (no. 4); p. 283-291

Publication Date: Apr 2021

Publication Type(s): Academic Journal

Available at [BMJ Quality & Safety](#) - from BMJ Journals

Available at [BMJ Quality & Safety](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMJ Quality & Safety](#) - from ProQuest (MEDLINE with Full Text) - NHS Version

Available at [BMJ Quality & Safety](#) - from Unpaywall

Abstract:

Introduction: This study reports the 30-day mortality, SARS-CoV-2 complication rate and SARS-CoV-2-related hospital processes at the peak of the first wave of the pandemic in the UK.

Methods: This national, multicentre, cohort study at 74 centres in the UK included all patients undergoing any surgery below the elbow at the peak of the UK pandemic. The primary outcome measure was 30- day postoperative mortality and was assessed in all enrolled patients. The secondary outcomes were SARS-CoV-2 complication rates and overall complication rates. A clinician survey relating to SARS-CoV-2 safety processes was carried out for each participating centre.

Results: This analysis includes 1093 patients who underwent upper limb surgery from the 1 to 14 April 2020 inclusively. The overall 30- day mortality was 0.09% (1 pre-existing SARS-CoV-2 pneumonia) and the mortality of day case surgery was zero. Most centres (96%) screened patients for symptoms prior to admission, only 22% routinely tested for SARS-CoV-2 prior to admission. The SARS-CoV-2 complication rate was 0.18% (2 pneumonias) and the



overall complication rate was 6.6% (72 patients). Both SARS-CoV-2-related complications occurred in patients who had been hospitalised for a prolonged period before their surgery and a total of 19 patients (1.7%) were SARS-CoV-2 positive.

Conclusions: The SARS-CoV-2-related complication rate for upper limb surgery even at the peak of the UK pandemic was low at 0.18% and the mortality was zero for patients admitted on the day of surgery. Urgent surgery should not be delayed pending the results of SARS-CoV-2 testing. Routine SARS-CoV-2 testing for day case upper limb surgery not requiring general anaesthesia may be excessive and have unintended negative impacts.

Database: CINAHL

16. Epidemiology of hand traumas during the COVID-19 confinement period.

Author(s): Fortané ; Bouyer, Michael; Le Hanneur, Malo; Belvisi, Baptiste; Courtiol, Guillaume; Chevalier, Kevin; Dainotto, Caroline; Loret, Marie; Kling, Agathe; Bentejac, Antonin; Lafosse, Thibault

Source: Injury; Apr 2021; vol. 52 (no. 4); p. 679-685

Publication Date: Apr 2021

Publication Type(s): Academic Journal

PubMedID: NLM33622592

Abstract:

Introduction: hand injuries are a common emergency mainly caused by domestic accidents or sport injuries. During the COVID-19 pandemic confinement period, with a cut off in transportation as well as in occupational and physical activities, we observed a decrease in medical and elective surgical activities but emergency cases of upper limb and hand surgery increased.

Materials and Methods: we conducted a retrospective epidemiological study to analyze two periods between the same dates in 2019 and 2020, for all the duration of the confinement period. We compared the numbers of consultations in the emergency department, elective surgeries, hand and upper limb emergency cases in our center and urgent limb surgeries in the nearby hospital. Then we compared the mechanisms and severity of injuries and the type of surgery.

Results: between 2019 and 2020 there was a decrease of consultations in the emergency department in our institution of 52%, a decrease of total elective surgeries of 75%, a decrease in surgeries for urgent peripheral limb injuries of 50%, whereas the hand and upper limb emergency remained stable or even increased by 4% regard to occupational and domestic accidents. There was a significant difference in the mechanism of injury with an increase of domestic accident and a decrease of occupational, road traffic and sport accidents. Severity of the injuries increased, with augmentation of the number of tissues involved and longer expected time of recovery.

Conclusion: during the confinement period of the COVID-19 pandemic, despite an important reduction of medical activities, the amount and severity of hand emergency cases increased. A specific plan regarding duty shift organization for hand trauma should be maintained regardless of the sanitary situation.

Database: CINAHL

17. COVID-19 and hand surgery: the perspective of an Italian hand therapist.

Author(s): Vigliarolo, D

Source: Hand surgery & rehabilitation; Apr 2021; vol. 40 (no. 2); p. 208

Publication Date: Apr 2021

Publication Type(s): Letter

PubMedID: 33309982

Available at [Hand surgery & rehabilitation](#) - from Unpaywall

Database: Medline



18. Clinical decision making in the provision of audiovisual care for upper limb trauma: a survey of UK experiences.

Author(s): McMullen ; Robson, Megan; Brewin, Mark Paul; Valand, Poonam; Sayed, Leela; Steele, Jessica

Source: Hand Therapy; Mar 2021; vol. 26 (no. 1); p. 17-25

Publication Date: Mar 2021

Publication Type(s): Academic Journal

Available at [Hand Therapy](#) - from Unpaywall

Abstract:

Introduction: For many patients, audio-visual appointments have provided a timely and efficient way of seeking advice, assessment and treatment for their hand injuries during the NHS response to COVID-19. This study aimed to explore the experience of hand units across the UK in determining the safe and judicious use of audio-visual outpatient care for the management of acute upper limb trauma.

Methods: An online cross-sectional survey was sent to the therapy leads of hand units across the UK. Questions focused on the experience of using audio-visual technology in the management of upper limb trauma, and the relevant factors in determining its appropriate use. A deductive mixed methods analysis was used to identify both common themes and capture community experience and characteristics.

Results: A total of 51 out of 76 hand therapy units completed the survey; a response rate of 67%. Of these, 82% (42/51) reported using audio-visual technology to manage upper limb trauma during the UK COVID-19 lockdown. When determining patient suitability for audio-visual consultations, 73% (37/51) of respondents reported the use of COVID-19 guidelines, but only 35% (18/51) reported the use of a clinical decision-making tool. In agreement with our experience at Salisbury Hospital Foundation Trust, 92% (47/51) had concerns relating to the use of audio-visual care.

Conclusion: The choice of safely managed remote care or in-person consultation has, to date, largely relied on the discretion of the clinician. A carefully designed clinical decision-making tool for the management of upper limb trauma is needed for use both in clinical practice and in future service planning.

Database: CINAHL

19. Peripheral ischemic limb necrosis (Acro-ischemia) associated with severe COVID-19 patients (COVID-19 limbs):

A report of three cases

Author(s): Khattab K.; Kempa A.; Atas R.; Asani H.; Ehab A.

Source: Lung India; Mar 2021; vol. 38 (no. 7)

Publication Date: Mar 2021

Publication Type(s): Article

Available at [Lung India : official organ of Indian Chest Society](#) - from Europe PubMed Central - Open Access

Available at [Lung India : official organ of Indian Chest Society](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Lung India : official organ of Indian Chest Society](#) - from Unpaywall

Abstract: The association between severe coronavirus disease 2019 and hypercoagulable state was observed in many reports. This may be explained by the presence of hypoxia, severe systemic inflammatory response, immobilization due to intensive care unit (ICU) admission, and diffuse intravascular coagulation. We report three patients who were admitted to our respiratory ICU with acute severe respiratory distress syndrome (ARDS) requiring mechanical ventilation due severe acute respiratory syndrome coronavirus 2 infection, who developed severe limb ischemia during the course of the disease. Copyright © 2021 Wolters Kluwer Medknow Publications. All rights reserved.

Database: EMBASE



20. The COVID-19 Pandemic: The effect on hand trauma in Europe's busiest major trauma centre.

Author(s): Welman, T; Hobday, D; El-Ali, K; Pahal, G S

Source: Journal of plastic, reconstructive & aesthetic surgery : JPRAS; Mar 2021; vol. 74 (no. 3); p. 644-710

Publication Date: Mar 2021

Publication Type(s): Letter

PubMedID: 33223445

Available at [Journal of plastic, reconstructive & aesthetic surgery : JPRAS](#) - from Unpaywall

Database: Medline

21. What Is the Impact of the COVID-19 Pandemic on Quality of Life and Other Patient-reported Outcomes? An Analysis of the Hand-Wrist Study Cohort.

Author(s): Cohen, Abigael; Selles, Ruud W; De Ridder, Willemijn A; Ter Stege, Marloes H P; Souer, J Sebastiaan; Wouters, Robbert M; Hand-Wrist Study Group Collaborators

Source: Clinical orthopaedics and related research; Feb 2021; vol. 479 (no. 2); p. 335-345

Publication Date: Feb 2021

Publication Type(s): Journal Article Observational Study

PubMedID: 33044314

Abstract:

BACKGROUND: The coronavirus disease 2019 (COVID-19) pandemic, and its associated lockdowns in many parts of the world, have changed our daily lives and may have a psychological impact on around the globe. However, it is unknown how this influences the patient-reported outcome measures (PROMs) of patients involved in ongoing clinical research and medical care. For both the current and potential future lockdowns, it is important to determine if PROMs collected during such a period can be interpreted with confidence.

QUESTIONS/PURPOSES: (1) Is there a difference in quality of life between patients in the COVID-19 period group (March 23, 2020 to May 4, 2020) and patients in a reference period group (from the same period in 2018 or 2019)? (2) Is there a difference in pain, hand function, anxiety, depression, and illness perception between patients in the COVID-19 period group and patients in the reference period group?

METHODS: This study was part of a large cohort study with routine outcome measures of patients with hand and wrist conditions. To answer our research questions, we analyzed two samples because not all PROMs were sent to participants at the same time points after treatment. The first sample consisted of all participants who completed PROMs on quality of life (QoL), pain, and hand function at their final follow-up time point, which was either 3, 6, or 12 months post-treatment. The second sample consisted of participants who completed PROMs 3 months post-treatment on anxiety, depression, and illness perception. Each sample consisted of two groups: a COVID-19 period group and a reference period group. We included 1613 participants in the first sample (COVID-19 period group: n = 616; reference period group: n = 997) and 535 participants in the second sample (COVID-19 period group: n = 313; reference period group: n = 222). The primary outcome was QoL, expressed in the EuroQol 5-Dimensions questionnaire (EQ-5D) index score. Secondary outcomes were the other domains on the EQ-5D, as well as pain, hand function, anxiety, depression, and illness perception.

RESULTS: We found no between-group differences in the EQ-5D index score (standardized mean difference 0.035; p = 0.98). Furthermore, there were no between-group differences in PROM scores for hand function, anxiety, or depression. There were, however, a few small differences in subdomain items regarding pain and illness perception, but we believe in aggregate that these are unlikely to make a clinically important difference in our main finding.

CONCLUSION: The COVID-19 pandemic and its associated lockdown had no influence on QoL and had little influence on secondary outcomes in participants who were part of the Hand-Wrist Study Cohort. This finding implies that PROMs data collected during this period can be used with confidence in clinical research. Our findings indicate that



when a pandemic like this occurs again, we can continue to use PROMs for analysis in clinical research or routine outcome measures.

LEVEL OF EVIDENCE Level III, therapeutic study.

Database: Medline

22. St Andrew's COVID-19 surgery safety study: hand trauma.

Author(s): Miranda, B H; Zberea, D E; Pinto-Lopes, R; Zweifel, C J; Sierakowski, A; Sood, M K; St Andrew's Collaborative

Source: Annals of the Royal College of Surgeons of England; Feb 2021; vol. 103 (no. 2); p. 96-103

Publication Date: Feb 2021

Publication Type(s): Journal Article

PubMedID: 33559543

Available at [Annals of the Royal College of Surgeons of England](#) - from EBSCO (MEDLINE Complete)

Available at [Annals of the Royal College of Surgeons of England](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Annals of the Royal College of Surgeons of England](#) - from ProQuest (MEDLINE with Full Text) - NHS Version

Abstract:

INTRODUCTION: Adaptation is vital to ensure successful healthcare recovery during the COVID-19 pandemic. Hand trauma represents the most common acute emergency department presentation internationally. This study prospectively evaluates the COVID-19 related patient risk, when undergoing management within one of the largest specialist tertiary referral centres in Europe, which rapidly implemented national COVID-19 safety guidelines.

MATERIALS AND METHODS: A prospective cohort study was undertaken in all patients referred to the integrated hand trauma service, during the UK COVID-19 pandemic peak (April-May 2020); all were evaluated for 30-day COVID-19 related death. Random selection was undertaken for patients with hand trauma who either underwent non-operative (control group) or operative (surgery group) management; these groups were prospectively followed-up within a controlled cohort study design and telephoned at 30 days following first intervention (control group) or postoperatively (surgery group).

RESULTS: Of 731 referred patients (566 operations), there were no COVID-19 related deaths. Both groups were matched for sex, age, ethnicity, body mass index, comorbidities, smoking, preoperative/first assessment COVID-19 symptoms, pre- and postoperative/first assessment isolation and positive COVID-19 contact ($p > 0.050$). There were no differences in high service satisfaction (10/10 compared with 10/10; $p = 0.067$) and treatment outcome (10/10 compared with 10/10; $p = 0.961$) scores, postoperative/first assessment symptoms (1%, 1/100 compared with 0.8%, 2/250; $p = 1.000$) or proportion of positive tests (7.1%, 1/14 compared with 2.2%, 2/92; $p = 0.349$), between the control ($n = 100$) and surgery ($n = 250$) groups.

CONCLUSION: These data support continued and safe service provision and no increased risk to patients who require surgical management. Such findings are vital for healthcare providers when considering service adaptations to reinstate patient treatment.

Database: Medline

23. The impact of COVID-19 on hand therapy practice.

Author(s): Ivy, Cynthia C; Doerrer, Sarah; Naughton, Nancy; Priganc, Victoria

Source: Journal of hand therapy : official journal of the American Society of Hand Therapists; Feb 2021

Publication Date: Feb 2021

Publication Type(s): Journal Article

PubMedID: 33820708



Available at [Journal of hand therapy : official journal of the American Society of Hand Therapists](#) - from Unpaywall

Abstract:

BACKGROUND: Hand therapists and health care providers across the spectrum have been profoundly impacted by COVID-19. Greater insight and information regarding how practitioners have been affected by this unparalleled pandemic is important.

PURPOSE: Survey research was performed to examine the impact of the COVID-19 pandemic on hand therapy practice.

STUDY DESIGN: Online survey research.

METHODS: Four constructs guided the development of the survey: psychosocial and financial impact; safety practice patterns; changes in current practice patterns; use of telehealth. The survey was distributed to members of the American Society of Hand Therapists from April 14, 2020 through May 4, 2020. Descriptive demographic data were obtained. Frequencies were examined using ChiSquare, correlations were examined using Spearman Correlation Coefficient, and means were compared via independent t-test.

RESULTS: A total of 719 members responded to the survey. Eighty-six percent of therapists reported feeling more stress than they did prior to the COVID-19 pandemic. This level of stress was similar across ages, practice settings, financial stability or instability, and geographical settings. Older therapists ($r_s = 0.04$) and those that practiced longer ($r_s = 0.009$) felt more comfortable with in-person treatment. Ninety-eight percent of therapists reported a decrease in caseload. Postoperative cases ($P = .0001$) and patients ages 19-49 were more likely to receive in-person treatment ($P = .002$). 46% of therapists reported providing telehealth services. Nontraumatic, nonoperative cases ($P = .0001$) and patients aged 65 or older were more likely to receive telehealth services ($P = .0001$). Younger therapists ($r_s = 0.03$) and therapists working in outpatient therapist owned, outpatient corporate owned, and outpatient academic medical centers ($\chi^2 [4, N = 637] = 15.9463, P = .003$) were more likely to utilize telehealth.

CONCLUSION: Stress was felt globally among hand therapy clinicians regardless of financial security or insecurity, age, practice area, or geographical setting. Therapists saw a drastic decrease in caseloads. In-person caseloads shifted primarily to postoperative cases.

STUDY DESIGN: Web based survey.

Database: Medline

24. Axillary artery thrombosis resulting in upper limb amputation as a COVID-19 sequela.

Author(s): Ramachandran, Riju; Vasudevan Pillai, Anoop; Raja, Suyambu; Sailesh, Sailakshmi

Source: BMJ case reports; Jan 2021; vol. 14 (no. 1)

Publication Date: Jan 2021

Publication Type(s): Case Reports Journal Article

PubMedID: 33500313

Available at [BMJ case reports](#) - from BMJ Journals

Available at [BMJ case reports](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMJ case reports](#) - from Unpaywall

Abstract: Novel COVID-19 continues to intrigue medical professionals with its varied presentations. Though it affects the respiratory tract primarily, thrombogenesis has been the Achilles' heel. A 44-year-old man diagnosed with COVID-19 presented with upper limb pain at a local hospital and was found to have thrombosis of the right axillary artery. Despite a successful embolectomy at the local hospital, there was re-occlusion of the axillary artery and the limb became ischaemic. He was referred to our institution by which time the limb became gangrenous above the elbow and had to be amputated. Extensive sloughing of the nerves was also seen in the local area.

Hypercoagulability presenting with various manifestations is common in COVID-19 and needs early anticoagulation. We present this asymptomatic patient who lost a limb to this COVID-19 sequelae.

Database: Medline



25. Assessment of musculoskeletal pain, fatigue and grip strength in hospitalized patients with COVID-19.

Author(s): Tuzun, Sansin; Keles, Aslinur; Okutan, Dilara; Yildiran, Tugbay; Palamar, Deniz

Source: European journal of physical and rehabilitation medicine; Jan 2021

Publication Date: Jan 2021

Publication Type(s): Journal Article

PubMedID: 33393277

Abstract:

BACKGROUND: Although there are some retrospective studies to present musculoskeletal findings of the COVID-19, still the muscle strength and fatigue has not been studied in detail.

AIM: To reveal the symptoms of musculoskeletal system in COVID-19 patients, to evaluate myalgia, arthralgia and physical/mental fatigue, to assess handgrip muscle strength, and to examine the relations of these parameters with the severity and laboratory values of the disease.

DESIGN: This study was designed as a cross-sectional, single-center case series.

SETTING: This study took place from May 15,2020, to June 30, 2020 at the Istanbul University-Cerrahpaşa, Cerrahpaşa Pandemia Services.

POPULATION: Hospitalized 150 adults with laboratory and radiological confirmation of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) according to WHO interim guidance were included in the study.

METHODS: The disease severity 2007 idsa/ats guidelines for community acquired pneumonia was used. Myalgia severity was assessed by numerical rating scale (NRS). Visual analog scale and Chalder Fatigue Scale (CFS) were used for fatigue severity determination. Handgrip strength (HGS) was measured by Jamar hand dynamometer.

RESULTS: 103 patients (68.7%) were non-severe and 47 patients (31.3%) were severe. The most common musculoskeletal symptom was fatigue (133 [85.3%]), followed by myalgia (102 [68.0%]), arthralgia (65 [43.3%]) and back pain (33 [22.0%]). Arthralgia, which was mostly notable at wrist (25 [16.7%]), ankle (24 [16.0%]) and knee (23 [15.3%]) joints, was significantly higher among the severe group. Severe myalgia was prevalent among myalgia sufferers regardless of COVID-19 severity. The physical fatigue severity score was significantly higher in severe cases, whereas this difference was not significant in mental fatigue score. Female patients with severe infection had "lower" grip strength, whereas grip strength among males did not differ significantly between non-severe and severe COVID-19 cases. Nevertheless the mean values in both genders and in age decades were below the specified normative values. CRP, ferritin, and LDH levels were significantly higher in women with "lower" grip strength compared to the "normal" group.

CONCLUSIONS: Aside from other multi-systemic symptoms, musculoskeletal symptoms are quite common in patients with COVID-19. Patients have severe ischemic myalgia regardless of disease activity. Although there is a muscle weakness in all patients, the loss of muscle function is more of a problem among women in connection with disease severity. Muscular involvement in coronavirus disease is a triangle of myalgia, physical fatigue, and muscle weakness.

CLINICAL REHABILITATION IMPACT: Muscle involvement in COVID-19 patients does not mean only myalgia but also a combination of physical fatigue and muscle weakness, and this should be considered in planning the rehabilitation strategies of COVID-19 patients.

Database: Medline

26. Case Report: Multiple Strokes and Digital Ischemia in a Young COVID-19 Patient.

Author(s): Shah, Harsh; Iyer, Aditya; Zaghlol, Raja; Raparla, Sandeep

Source: The American journal of tropical medicine and hygiene; Jan 2021; vol. 104 (no. 1); p. 60-62

Publication Date: Jan 2021

Publication Type(s): Case Reports Journal Article



PubMedID: 33205744

Available at [The American journal of tropical medicine and hygiene](#) - from EBSCO (MEDLINE Complete)

Available at [The American journal of tropical medicine and hygiene](#) - from Unpaywall

Abstract: COVID-19 is an infectious disease caused by SARS-CoV-2. This enveloped RNA coronavirus primarily has tropism for the respiratory tract. However, it has also been shown to have various extrapulmonary manifestations such as pulmonary embolism, ischemic strokes, deep venous thrombosis, or arterial thrombosis. We present a case of a 34-year-old woman who had severe COVID-19 infection with no respiratory symptoms and developed strokes in multiple vascular territories and digital ischemia due to thrombosis formation in the brachial circulation of her arm despite receiving therapeutic anticoagulation.

Database: Medline

27. The impact of COVID-19 on shoulder and elbow trauma in a skeletally immature population: an Italian survey.

Author(s): Gumina, Stefano; Proietti, Riccardo; Villani, Ciro; Carbone, Stefano; Candela, Vittorio

Source: JSES international; Jan 2021; vol. 5 (no. 1); p. 3-8

Publication Date: Jan 2021

Publication Type(s): Journal Article

PubMedID: 32984859

Available at [JSES international](#) - from Unpaywall

Abstract:

Background: The aim of this study was to evaluate the impact of COVID-19 on the shoulder and elbow trauma in a skeletally immature population in 30 days starting from March 8, 2020, the first day of restrictions in Italy, and to compare it with the same period of 2019.

Materials and methods: All the skeletally immature (younger than 18 years) patients managed in the emergency unit of our hospital between March 8, 2020, and April 8, 2020 (COVID-19 [C19] period), for a shoulder and elbow trauma were retrospectively included and compared with patients with similar ages admitted in the same period of 2019 (no COVID-19 period). Six categories of diagnosis were distinguished: (1) contusions, (2) no physeal fractures, (3) physeal fractures (Salter-Harris), (4) sprains/subluxations, (5) dislocations, and (6) others (tendinitis, wounds, low back pain, and joint inflammation). According to the mechanism of injury, we arbitrarily distinguished 5 subgroups: (1) accidental fall; (2) sport trauma; (3) accident at school; (4) high-energy trauma occurred by car, public transport, and pedestrian investment; and (5) fall from height.

Results: During the C19 period, the number of total accesses in our trauma center steeply decreased: two-thirds less. Regardless of the patient age, we performed 65% less first aid shoulder/elbow services. The number of skeletally immature patients treated at our trauma center for all types of injuries was 350 during the no COVID-19 period and 54 during the C19 period; therefore, the influx of pediatric patients during the C19 period decreased by 84.6%. Furthermore, during the C19 period, (1) there were no cases of fractures, physeal fractures, and dislocations of the shoulder; (2) there were no cases of contusion, physeal fractures, and dislocations of the elbow; and (3) we observed the absence of high-energy, sports, and school injuries; and (4) during the pandemic, shoulder and elbow injuries mainly occurred as a result of accidental fall at home.

Conclusions: The pandemic forced us to become aware of the ways and places where skeletally immature subjects report shoulder and elbow traumas; therefore, it would be desirable that more considerable attention be directed toward the prevention of injury in areas at risk.

Database: Medline

28. Pediatric COVID toes and fingers

Author(s): Koschitzky M.; Oyola R.R.; Abittan B.; Silverberg N.; Lee-Wong M.



Source: Clinics in Dermatology; Jan 2021; vol. 39 (no. 1); p. 84-91

Publication Date: Jan 2021

Publication Type(s): Article

PubMedID: 33972057

Available at [Clinics in dermatology](#) - from Unpaywall

Abstract: The emergence of the coronavirus disease 2019 (COVID-19) worldwide pandemic has been associated with a new constellation of cutaneous features in children. Among the unusual dermatologic presentations are the so-called COVID toes, inflammatory nodules of the feet and toes, sometimes involving the hands and fingers. These lesions mimic acral pernio, the synonym being chilblains. Unlike adult patients with COVID toes, children are less likely to manifest symptomatic COVID-19. Although a few studies have found some linkage to COVID-19 through the serum IgA or IgG severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) spike protein, other studies have no demonstrable linkage suggesting that barefoot children in cold weather develop such lesions. It appears that the chilblain-like lesions related to the period of the COVID-19 pandemic may reflect a brisk immune response portending a good prognosis and perhaps some form of innate immunity. The possible need to screen for coagulopathy is unclear, but this has been suggested in one report. Until we fully understand the pattern of immune response to COVID-19, questions may persist as to how disease manifestations are linked to SARS-CoV-2 exposures. Copyright © 2020 Elsevier Inc.

Database: EMBASE

29. No credible evidence for links between 2D:4D and COVID-19 outcomes: A probabilistic perspective on digit ratio, ACE variants, and national case fatalities

Author(s): Jones A.L.; Jaeger B.; Schild C.

Source: Early Human Development; Jan 2021; vol. 152

Publication Date: Jan 2021

Publication Type(s): Article

PubMedID: 33227636

Available at [Early human development](#) - from Unpaywall

Abstract: Research into COVID-19 susceptibility and outcomes are critical, but claims must be carefully evaluated to inform policy decisions. In a recent series of articles, Manning and Fink [1-3] use national-level data to describe associations between case-fatality ratios and male and female finger ratios (2D:4D), a suggested measure of prenatal androgen exposure, as well as angiotensin-converting enzyme (ACE) allele and genotype frequencies. The authors suggest that 2D:4D is linked with ACE variant prevalence, and that higher male 2D:4D is associated with higher case fatality ratios, and point to 2D:4D as a useful prognostic measure for COVID-19 susceptibility. A critical review and robust Bayesian analysis of the hypothesis is described here, finding no conclusive evidence of COVID-19 mortality and 2D:4D, nor associations between 2D:4D and ACE1 allele or ACE2 genotype frequency. This absence of evidence is present for data taken from the second wave of COVID-19 in October 2020. Problematic theoretical grounding, individual-level conclusions drawn from national-level data, and issues with statistical inference in the original articles are discussed. Taken together, the current data offer no clear utility of 2D:4D in determining COVID-19 outcomes. Copyright © 2020

Database: EMBASE

30. Upper Extremity Arterial Thromboembolism in a Coronavirus Patient. A Case Report

Author(s): Scott B.-A.; Edwards J.-A.; Aboushi H.; Lee P.; Daniel M.; Rancy S.; Garg K.; Johnson W.; Patalano P.; Al-Ajam M.; Rotella V.; Heimann D.

Source: SN Comprehensive Clinical Medicine; Jan 2021; vol. 3 (no. 1); p. 273-278



Publication Date: Jan 2021

Publication Type(s): Article

Available at [SN comprehensive clinical medicine](#) - from Unpaywall

Abstract: The coronavirus disease 2019 pandemic has impacted millions of people worldwide. This novel virus has a variety of presentations and complications. Notably, patients with this infection have an associated coagulopathy, presenting with symptoms such as gastrointestinal bleeds, deep vein thrombosis, ischemic cerebrovascular events, and pulmonary embolism. Although there are documented cases of venous thromboembolism in patients with coronavirus disease 2019, the authors present an interesting case of upper extremity arterial thromboembolism in a 75-year-old patient surgically treated for arterial thrombus removal. We also discuss diagnosis, medical management, and surgical approach to an upper extremity arterial thromboembolism in a patient with coronavirus disease 2019, to highlight the challenges of hypercoagulability in such patients. Copyright © 2021, The Author(s), under exclusive licence to Springer Nature Switzerland AG part of Springer Nature.

Database: EMBASE

31. How hand and wrist trauma has changed during covid-19 emergency in Italy: Incidence and distribution of acute injuries. What to learn?

Author(s): Poggetti, Andrea; Del Chiaro, Andrea; Nucci, Anna Maria; Suardi, Chiara; Pfanner, Sandra

Source: Journal of clinical orthopaedics and trauma; Jan 2021; vol. 12 (no. 1); p. 22-26

Publication Date: Jan 2021

Publication Type(s): Journal Article

PubMedID: 32921952

Available at [Journal of clinical orthopaedics and trauma](#) - from Europe PubMed Central - Open Access

Available at [Journal of clinical orthopaedics and trauma](#) - from Unpaywall

Abstract:

Background: the purpose is to gather and analyze the statistical datas of wrist and hand injuries admitted to the Hand and Reconstructive Microsurgery and Replantation Hub center of Careggi Hospital, Florence during the first two months of COVID-19 epidemic in Italy. The Authors investigated how the drastic changes in daily activities modified the epidemiology of hand trauma lesions.

Methods: The Authors analyzed the characteristics of hand and wrist traumatic disorders during the months of February and March comparing 2019 to 2020. Collected data included age distribution, traumatic etiology, diagnosis and type of surgical procedures.

Results: The total number of orthopedic and trauma patients significantly decrease in 2020 compared to 2019 (3360 vs 1470). The number of hand and wrist injuries didn't show a significant difference between 2019 and 2020 instead (192 vs 131). The overall number of patients hospitalized and surgically treated at our Operative Unit (OU) was 168 in 2019 and 120 in 2020. Male patients resulted prevalent (60,7 M vs 39,3F/2019; 63,2 M vs 36,8F/2020). In terms of patient age, in 2020 we registered a significant reduction of cases in the 20-35-year-old age group and a significant increase in the 51-65 and 66-80-year-old age groups. Traffic-related, sport-related and fortuitous injuries significantly decreased in 2020, while the number of domestic accidents significantly increased. Analyzing the Hospital Discharge Records (HDR), we found a significant increase in the number of proximal and middle phalanx fractures; no significant differences were found for other kinds of discharge diagnosis. As for the choice of surgical treatment options, no differences were found between 2019 and 2020.

Conclusion: Even during drastic movement restrictions and the prolonged suspension of work and leisure activities secondary to COVID-19 epidemic in 2020, hand and wrist traumas rate remained almost the same compared to the same period of the previous year. Nevertheless, a significant change in the etiology and patient age was registered. In fact, sport and traffic-related traumas decreased respect to domestic traumas, while the previous prevalent involvement of young adults was surpassed by accidental hand traumas in the elderly and active adults.

Database: Medline



32. Service reconfiguration in the department of hand surgery during the UK COVID-19 lockdown: Birmingham experience.

Author(s): Picardo, Natasha Emma; Walker, Harriet; Vanat, Qureish; Nizar, Bafiq; Madura, Tomas; Jose, Rajive

Source: Postgraduate medical journal; Jan 2021

Publication Date: Jan 2021

Publication Type(s): Journal Article

PubMedID: 33504615

Available at [Postgraduate medical journal](#) - from BMJ Journals

Available at [Postgraduate medical journal](#) - from Unpaywall

Abstract: In early 2020, the COVID-19 pandemic swept through the UK and had a major impact on healthcare services. The Birmingham hand centre, one of the largest hand trauma units in the country, underwent a dramatic service reconfiguration to enable robust and safe provision of care that would withstand the peak of the pandemic. Streamlining our service significantly reduced patient footfall and hospital admission while preventing intra-hospital viral transmission. Many of the changes implemented have been kept as permanent adjustments to our practice as this new model of care yields higher patient satisfaction and efficacy to withstand the pressures of further peaks in the pandemic.

Database: Medline

33. Acute upper limb ischemia as the first manifestation in a patient with COVID-19.

Author(s): Shao, Tony; In-Bok Lee, Christina; Jabori, Sinan; Rey, Jorge; Duran, Elizabeth Ramos; Kang, Naixin

Source: Journal of vascular surgery cases and innovative techniques; Dec 2020; vol. 6 (no. 4); p. 674-677

Publication Date: Dec 2020

Publication Type(s): Case Reports

PubMedID: 32844136

Available at [Journal of vascular surgery cases and innovative techniques](#) - from Unpaywall

Abstract: Coronavirus disease-19 (COVID-19) first emerged in December 2019 in China and rapidly spread worldwide. Although various studies have reported that COVID-19 is associated with a hypercoagulable state and thrombotic complications in critically ill patients, there are few case reports on thrombotic events as one of the presenting symptoms. We report a case of acute upper extremity ischemia as the initial clinical presentation of a patient with COVID-19.

Database: Medline

34. Acute limb ischemia as sole initial manifestation of SARS-CoV-2 infection.

Author(s): Thompson, Owen; Pierce, Damon; Whang, Dennis; O'Malley, Meaghan; Geise, Bob; Malhotra, Uma

Source: Journal of vascular surgery cases and innovative techniques; Dec 2020; vol. 6 (no. 4); p. 511-513

Publication Date: Dec 2020

Publication Type(s): Case Reports

PubMedID: 32864520

Available at [Journal of vascular surgery cases and innovative techniques](#) - from Unpaywall

Abstract: We present the case of a patient with acute upper limb ischemia as the sole initial manifestation of severe acute respiratory syndrome associated with coronavirus disease 2 infection, without concomitant respiratory



symptoms or pneumonia. Viral infection presumably precipitated the patient's thromboembolic event, causing multifocal vascular occlusions. This case illustrates that coronavirus disease-19 must be considered in the differential diagnosis of patients presenting with signs or symptoms of coagulopathy, even in the absence of respiratory symptoms. We believe that an awareness of the variety of clinical presentations in patients with coronavirus disease-19, particularly extrapulmonary manifestations, is critical for optimal patient management as well as implementation of appropriate infection prevention measures.

Database: Medline

35. A protocol for wide awake local anaesthetic no tourniquet (WALANT) hand surgery in the context of the coronavirus disease 2019 (COVID-19) pandemic.

Author(s): Hobday ; Welman, Ted; O'Neill, Niamh; Pahal, Gurjinderpal Singh

Source: Surgeon (Elsevier Science); Dec 2020; vol. 18 (no. 6)

Publication Date: Dec 2020

Publication Type(s): Academic Journal

PubMedID: NLM32631702

Available at [The surgeon : journal of the Royal Colleges of Surgeons of Edinburgh and Ireland](#) - from Unpaywall

Abstract: There are new and unique challenges to emergency surgery service provision posed by the Coronavirus disease 2019 global pandemic. It is in the best interests of patients for care providers to streamline services where possible to maximise the number of cases that can be performed by limited surgical and anaesthetic teams, as well as minimising patient interactions and admission times to reduce potential spread of the virus. There is evidence that wide awake local anaesthetic no tourniquet (WALANT) hand and upper limb surgery can meet this need in a number of ways, including reduced pre-operative work up, the lack of a need for an anaesthetist or ventilator, shorter inpatient stays and improved cost efficiencies. Though updated national guidelines exist that advocate increased use of WALANT surgery in response to the pandemic there are not yet clear protocols to facilitate this. We outline a protocol being developed at one UK Major Trauma Centre tailored to the expansion of WALANT hand and upper limb emergency surgery with particular emphasis on facilitating timely surgical care while minimising healthcare encounters pre and post-operatively. This will serve to reduce potential transmission of the virus and create cost efficiencies to free funding for COVID-19 related care. Our protocol is easily replicable and may be of benefit to other centres dealing with emergency upper limb surgery in the new climate of COVID-19.

Database: CINAHL

36. Movement disorders as a new neurological clinical picture in severe SARS-CoV-2 infection

Author(s): Cuhna P.; Herlin B.; Vassilev K.; Dupont S.; Kas A.; Lehericy S.; Worbe Y.; Apartis E.; Vidailhet M.

Source: European Journal of Neurology; Dec 2020; vol. 27 (no. 12)

Publication Date: Dec 2020

Publication Type(s): Letter

PubMedID: 32786131

Available at [European journal of neurology](#) - from Wiley Online Library

Available at [European journal of neurology](#) - from Unpaywall

Database: EMBASE

37. Increased rates of hand ischemia following arterial cannulation in patients with severe COVID19-related pneumonia.



Author(s): Dorigo, Walter; Fargion, Aaron; Paperetti, Laura; Falso, Roberto; Bonizzoli, Manuela; Fontanari, Paolo; Poggesi, Loredana; Pratesi, Carlo

Source: Thrombosis research; Oct 2020; vol. 194 ; p. 33-35

Publication Date: Oct 2020

Publication Type(s): Letter

PubMedID: 32563062

Available at [Thrombosis research](#) - from Unpaywall

Database: Medline

38. Acute Upper Limb Ischemia Due To Arterial Thrombosis in a Mild COVID-19 Patient: A Case Report.

Author(s): Hanif, Muhammad; Ali, Mukarram Jamat; Haider, Muhammad Adnan; Naz, Sidra; Ahmad, Zeeshan

Source: Cureus; Sep 2020; vol. 12 (no. 9); p. e10349

Publication Date: Sep 2020

Publication Type(s): Case Reports

PubMedID: 33062472

Available at [Cureus](#) - from Europe PubMed Central - Open Access

Available at [Cureus](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Cureus](#) - from Unpaywall

Abstract: Coronavirus disease 2019 (COVID-19) which has now been declared a global pandemic, initially began as a pneumonia caused by novel coronavirus called severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) in Wuhan, China. COVID-19, in addition to respiratory symptoms, is also being recognized to have different manifestations including myocardial infarction, seizures, meningitis, diarrhea, and coagulopathy. Here we report a case of a 75-year-old female patient with mild COVID-19 who later developed acute limb ischemia due to arterial thrombosis to highlight that, contrary to the association of coagulopathy with severe COVID-19, thrombosis can also occur in patients with mild COVID-19.

Database: Medline

39. Guillain-Barré syndrome presenting with COVID-19 infection.

Author(s): Ameer ; Shekhda, Kalyan Mansukhbhai; Cheesman, Ann

Source: BMJ Case Reports; Sep 2020; vol. 13 ; p. 1-3

Publication Date: Sep 2020

Publication Type(s): Academic Journal

Available at [BMJ case reports](#) - from BMJ Journals

Available at [BMJ case reports](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMJ case reports](#) - from Unpaywall

Abstract: A construction worker in his 30s presented three times in 4 days with progressive upper and then lower limb weakness. On the first two occasions he had no systemic symptoms, but on the third presentation he had fever and cough, starting from day 4 of weakness. Examination identified weakness in all four limbs and areflexia, suggesting a peripheral neuromuscular disorder. Investigations were consistent with Guillain-Barré syndrome and additional COVID-19 (SARS-CoV-2) infection. The patient improved after immunoglobulin treatment. At least four cases of Guillain-Barré syndrome have been reported in the literature with concurrent COVID-19 illness in whom respiratory signs appeared a few days after the onset of neurological signs. With the incubation period for COVID-19 respiratory symptoms believed to be up to 14 days, it is possible that neurological symptoms could develop before



respiratory and other symptoms. During the current pandemic, presence of concurrent COVID-19 infection needs to be considered in patients presenting with Guillain-Barré syndrome.

Database: CINAHL



