Treating Chronic Pain of COVID-19

Subjects: Infectious Diseases
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Careful triage of patients is mandatory in order to avoid overcrowding of hospital spaces. Telemedicine could represent a promising tool to replace in-person visits and as a screening tool prior to admitting patients to hospitals. Opioid medications can affect the immune response, and therefore, care should be taken prior to initiating new treatments and increasing dosages. Epidural steroids should be avoided or limited to the lowest effective dose. Non urgent interventional procedures such as spinal cord stimulation and intrathecal pumps should be postponed. The use of personal protective equipment and disinfectants represent an important component of the strategy to prevent viral spread to operators and cross-infection between patients due to the SARS-CoV-2 outbreaks.

Keywords: COVID-19 ; chronic pain ; pain management ; severe acute respiratory syndrome coronavirus 2 ; telemedicine ; analgesics ; opioid ; spinal cord stimulation ; disinfectants

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Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2 which can lead to COVID-19 disease) was declared a Public Health Emergency of International Concern on 30 January 2020 and, and as of March 2021, more than 120 million people worldwide have been infected, with more than two million deaths [1].

Pain physicians are treating an ever-increasing number of patients suffering from chronic pain [2]

The most recent data indicate that in Europe, moderate or severe chronic pain affects 22% of the population [3]. In the UK, results of a 2016 community-based population study estimated that 10.4% to 14.3% of the population reported suffering from moderate to severely disabling chronic pain and more than half of the elderly population claimed that chronic pain is the factor which most affects their quality of life [4][5]. Hence, satisfactory and tailored chronic pain management is a priority both morally and ethically, helping maintain patients' quality of life and protecting against subsequent psychological and physical complications [6][7][8]. During the SARS-CoV-2 pandemic, due to the reallocation of public health resources and the emergence of a series of complex needs and urgent requirements [9][10][11], the need for comprehensive chronic pain management has become even more challenging.

In countries in which the authors work (Italy, UK, USA), hospital-based chronic pain management activities were almost completely suspended from March until June 2020 and have then gradually been resumed. Physicians face the need to deliver high-quality treatments while ensuring safety for patients and health care workers while preventing infection spreading and contamination.

The high transmission rate of SARS-CoV-2 implies a rigorous platform of safety surveillance and meticulous organization in order to avoid further spreading of the disease and hospital outbreaks of infection while allowing for care of chronic pain patients.

Accordingly, the aim of this manuscript is to provide practical advice on the management of chronic pain in patients with suspected, presumed, or confirmed diagnoses of SARS-CoV-2 infection. Additionally, recommendations for hygienic maintenance of the clinic and its equipment during this challenging time are provided. Particular points of focus include: (A) interventional pain specific techniques under fluoroscopy/ultrasound guidance; (B) opioid use among COVID-19 patients; (C) telemedicine provision to chronic pain sufferers; (D) preventive measures to adopt for SARS-CoV-2 infected patients, both in acute and chronic pain settings; and (E) the psychological impact of COVID-19 among both patients and physicians involved in pain management.

Due to the COVID-19 pandemic, there exists an increased risk of chronic pain patients failing to receive critical treatment. Chronic pain patients may also be at increased risk of COVID-19 disease due to multiple factors, such as chronic opioid therapy potentially making them more susceptible to the COVID-19 infection due to immunosuppression [12][13][14][15][16][17]. As outlined, added precautions relating to appropriate social distancing and more conscientious sanitization processes in hospitals and clinics need to become a greater focus for those treating patients with pain. Triage of pain patients, while

always important, becomes even more imperative due to the need to distinguish between those who may be adequately treated via telemedicine and those requiring in-clinic consultations.

The first author (GLB) identified and invited pain physicians and psychologists to join an expert panel to develop practical advice. All panel members were engaged in caring for patients with chronic pain and had experience and training in clinical research in secondary and tertiary care settings. Panel members were interviewed and asked to summarize the most relevant articles published between June and September of 2020 that focused on the treatment of chronic pain in COVID-19 patients. The literature search was conducted using the PubMed, MEDLINE/OVID, and SCOPUS databases. Each author selected relevant articles in their area of major expertise (as detailed in authors' contribution) Based on the present pathophysiological understanding of COVID-19 and potential practice implications according to the complex management of chronic pain, the panel developed its practical advice in this comprehensive narrative review with the purpose of summarizing the most relevant point of focus regarding chronic pain management during SARS-CoV-2 outbreaks.

Based on the limited extant literature in conjunction with our clinical experiences, we suggest that interventional pain management can be reinitiated, albeit cautiously, to more effectively treat chronic pain patient population. As steroids are associated with immunosuppression, as well, throughout the remainder of the COVID-19 pandemic, epidural steroid injections should be performed judiciously and with the lowest possible effective dose [18]. SCS and ITP difficulties or technical problems should, when possible, initially be addressed remotely, with in-person visits only in cases of infection or other emergencies. A key element for the future should be even more conscientious planning of pain management with appropriate patient selection. Without exception, efforts should be geared toward enhancing safety conditions in order to protect patients', physicians', and support staff's health and well-being. Given that the duration of the COVID-19 pandemic is uncertain, pain clinicians can adopt "new best practices" that may allow them to treat patients with pain now, as well as more safely and effectively in the future. This review has several limitations, while we analyzed the relevant publications and recommendations that we reviewed between June and December of 2020, we are aware that this review may not be completely exhaustive given that the knowledge on this topic is evolving. We mainly focus on the organization of the clinical practice and did not cover specific clinical topics. The authors work in different countries and regions where regulations, hospital organization, security and screening protocols are different, therefore some recommendations could not be applied everywhere.

However, we hope that this review serves as source of guidance to chronic pain clinicians in the future, and believe that it will remain relevant, irrespective of the course of the pandemic.

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