

Ultrasound-Guided Interventions During the COVID-19 Pandemic—A New Challenge

To the Editor:

The pandemic of the COVID-19 started in China in December 2019 with a rapid spread to the whole world. The COVID 19 is associated with different degrees of severe respiratory illness and might lead to a severe acute respiratory syndrome, which ends in many cases with death. The spread of the infection between humans occurs via droplets, contaminated hands, or surfaces, with an incubation time of 2 to 14 days.

Most countries went through the lockdown to try to flatten the contagion curve quickly. In these countries, hospitals suspended normal activities to reallocate healthcare professionals to cope with the pandemic. Furthermore, the paralysis period of the planned health activity is generating a waiting list of visits and procedures that must be incorporated into the health process. Although we are experiencing a health emergency never seen before, we must not forget that it is our ethical and moral obligation to continue taking care of our patients, not only patients infected with SARS-CoV-2, because every patient has the right to be cared for their demands and needs.

Patients with chronic pain, such as those with musculoskeletal, neuromuscular, or oncological conditions, have been mostly deprived of the necessary resources to alleviate their symptoms and make their lives somewhat more bearable. In most countries during lockdown, patients have been allowed to use only telemedicine services, with the aim of reducing the risk of contagion. Unfortunately, in the management of these conditions, many of the treatments are interventional and therefore not accessible. Not performing or postponing a procedure may lead to morbidity and other chronic sequelae, including irreparable functional impairment.

Muscle spasticity, chronic musculoskeletal pain as rotator cuff pathologies or chronic tendinopathies and fasciitis, hip and knee osteoarthritis, entrapment neuropathies, polyneuropathy (diabetic, etc.), or nerve injuries are disabling and have a great impact on daily activities performance and quality of life.

Adding to the chronic pain and physical disability, these patients experience fear, anxiety, and loneliness due to the restrictive measures adopted to limit outbreaks, seriously undermining the mental health.

For this reason, it is essential to progressively reactivate health services and ensure our complete medical support to the population, which obviously include interventional and ultrasound-guided treatments, such as intra-articular and tendon injections, regenerative medicine, botulinum toxin for pain and especially for spasticity treatment, etc.

Although there are no references or experiences on how to resume health care in a pandemic and whether the previously established processes are equally valid and safe for patients and healthcare professionals, we can still integrate those protocols with higher safety standards. It would be good to remember that the criteria and protocols for assigning and defining priorities for access to hospital care (elective, urgent, etc.) must be applied individually and respecting professional ethics.

In the countries that are, albeit partially, exiting lockdown, we suggest the following recommendations to maintain a high safety standard. Patients infected with SARS-CoV-2 will follow a dedicated path, being preferably treated at COVID-19 blocks/dedicated COVID-19 hospitals or clinics. Consider establishing triage stations outside or at least at the facility entrance to screen individuals. The non-COVID service must be reorganized, reducing the number of patients who can be normally attended, minimizing gatherings of people and waiting time in wards, consultations, or procedural rooms, and to allow time for sanitation between patients.

Patients should be contacted in advance to investigate their clinical

conditions and prioritize, to evaluate any possible exposure to coronavirus, in case to prescribe diagnostic test (serological or reverse transcriptase-polymerase chain reaction), and to inform that they must wear at least a facemask upon arrival, at the scheduled time, to the facility. Of note, N95/FFP2/KN95 masks with an exhaust valve might not provide infection control, so healthcare personnel must change to or cover with a surgical mask.

Although these are not aerosol-generating procedures, many of them take time, so we recommend the health personnel present in the procedural rooms to always wear nonvalve N95 masks. Healthcare personnel should always wear personal protective equipment. A practical guide on how to safely conduct interventional procedures is shown in Figure 1.

Although there are no specific studies on the possible interference of drugs or treatments for the management of chronic pain in COVID-19 patients, it is important to elucidate some doubts, especially regarding the use of anti-inflammatory and corticosteroids, which are currently under discussion. Despite some controversy, there is no evidence that the use of nonsteroidal anti-inflammatory drugs can increase the severity of COVID-19; therefore, they can be used when needed.¹

Although the use of corticosteroids predisposes to a higher risk of infection, the immunosuppressive effect is dose and time dependent. Low doses of corticosteroids rarely increase the risk of infections and are not contraindicated for the treatment of rheumatic diseases, even during this pandemic.^{2,3} Likewise, there is no absolute contraindication to the use of corticosteroids for the Herpes Zoster-associated pain. Therefore, low doses of oral corticosteroids as adjunctive therapy, or for local injection of depot formulations, can be used to evaluate the risk and benefits. Every clinician should be alert on appearance of future new recommendations.

In conclusion, safe practice to protect patients and healthcare personnel is crucial to prevent the spread of COVID-19 and to maintain chronic pain services to provide effective treatment for patients during this pandemic.

PRACTICAL GUIDE FOR INTERVENTIONAL PROCEDURES

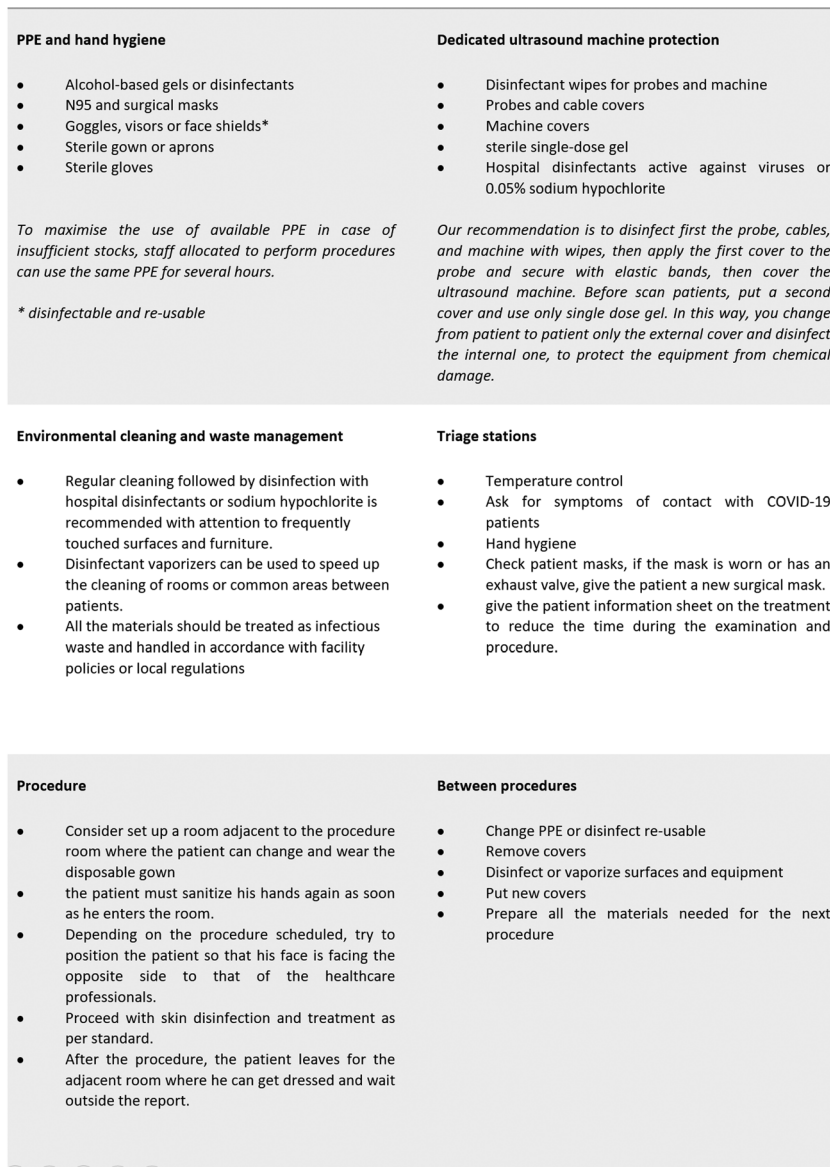


FIGURE 1. Practical guide on how to safely conduct interventional procedures.

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