

Effect of COVID-19 Pandemic on Orthopaedic and Physical Therapy Practice

Anood I Faqih¹ and Vivek M Sodhai^{2*}

¹Musculoskeletal Physiotherapist, Physio Studio, Aundh, India

²Paediatric Orthopaedic Specialist, Physio Studio, Aundh, Pune, India

*Corresponding Author: Vivek M Sodhai, Paediatric Orthopaedic Specialist, Physio Studio, Aundh, Pune, India.

Received: April 23, 2020; Published: May 22, 2020

Abstract

Coronavirus disease (COVID-19), an infectious disease caused by a newly discovered coronavirus was declared a pandemic in the mid of March. Many countries announced lockdown measures to contain the disease and prevent human-to-human transmission. The pandemic has tremendously affected the practices of the medical profession. New teleconsultation guidelines have been released during this period to help medical professionals reach out to the patients. We intend to highlight the effect of COVID-19 pandemic on orthopaedic and physical therapy practices in our region.

Keywords: COVID-19; Pandemic; Orthopaedics; Physical therapy; Teleconsultation

COVID-19 is an infectious disease caused by a newly discovered severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Preventive measures to decrease the chances of human-to-human transmission include social distancing, staying at home, avoiding crowded places, washing hands frequently, and avoiding touching the eyes, nose, or mouth with contaminated hands [1]. Many regions have been able to contain the disease by following these measures. India declared COVID-19 as a “notified disaster” on 14th March 2020 [2]. To contain the disease spread and break the chain of human transmission, the Government of India announced a nationwide lockdown on 24th March 2020 [3].

To help people with medical consultations amidst the lockdown, the Ministry of Health and Family Welfare (MoHFW) issued guidelines for telemedicine [4]. While it is appropriate to practice telemedicine in certain medical fields, it is of limited help in orthopaedic and physical therapy practice.

Orthopaedic practice

COVID-19 pandemic has affected the daily practice of orthopaedic surgeons in certain ways. The orthopaedic field is complemented by other supportive communities like manufacturers of instruments, implants, and orthotics. The pandemic has caused significant effects on orthopaedic practice such as delay in patients’ treatment due to delay in availability of customised resources, reduced supply of orthopaedic implants, rescheduling of elective orthopaedic surgeries, etc. as reported by Haleem., *et al* [5]. Common orthopaedic illnesses like osteoarthritis of the knee, lumbar spondylosis, ligament sprains, joint strains can be addressed with telemedicine. However, orthopaedic ailments like fracture neck femur, intra-articular fractures, congenital deformities requiring early medical intervention, infections, dressings or stitch removal of previously operated cases, etc. need to be reviewed in person by the orthopaedic specialist.

We report our experience of treating 2 clubfoot patients during the COVID-19 pandemic. 2 clubfoot patients were treated during this period. These patients presented to our clinic in February 2020 during the first two weeks of life. Ponseti manipulation and casting method, that is considered to be the gold standard treatment of clubfeet, was started as per protocol. Patients were treated with weekly foot manipulation and change of casts. 4 casts were required for the deformity correction and a percutaneous needle tendon Achilles tenotomy before the last cast. After completion of 3 weeks of the last cast, it was planned to immediately put these patients in foot-abduction braces (FAB). It is important to provide FAB immediately after cast removal since the deformity is reported to recur with FAB non-compliance or unavailability. However, due to the pandemic and strict lockdown guidelines which is of utmost importance given the current scenario,

there is an acute shortage of resources to provide customized FAB. Considering the need for the hour, the decision to extend the duration of the last cast by 3 weeks was taken. At cast removal, full correction of the deformity was achieved for both patients and FAB was prescribed. Foot abduction and ankle dorsiflexion exercises were taught to the family and patients are being followed-up regularly.

Physical therapy practice

The COVID-19 pandemic has posed a challenge in delivering physical therapy services. This being a profession where the therapist needs to be in contact with the patient through most of the treatment, it is rather difficult to execute sessions. We require a timely assessment of the patient's physical abilities and disabilities by doing different testing maneuvers. Progression is headed forward by interpretations from these timely assessments. Most of our treatment needs manual contact for carrying out joint mobilizations and stretches. Also, physical assistance is required in patients with limited mobility. However, due to the inability to review the patients in person, it is a greater challenge to carry out our treatment and consultations.

We are using the telemedium to reach out to the concerns of our patients. Using apps like Whatsapp, zoom, skype, facetime, etc. it has been possible to conduct physical therapy sessions online. Problems that we usually face are connectivity issues, technical glitches like audio/video pauses, multiple call reconnections, etc. This breaks the sync of the exercises and sometimes, we need to start over again.

Patients do not have all the necessary equipment like dumbbells, weight cuffs, therabands, balance boards, etc. to effectively carry out their sessions. The absence of a mobilization plinth makes it difficult to go into certain postures and exercise to the maximum advantage. The use of electrotherapy in physical therapy cannot be done via virtual communication.

However, we have been using modifications that can be done to substitute this equipment to carry out the exercises. For e.g. using filled water bottles instead of dumbbells, using weighted packs filled with salt/grains as weight cuffs, or a simple scarf looped to form a stretching belt.

Teleconsultation has its own pros and cons. It has definitely opened doors to consult patients outside our geographic region. It is relatively less expensive to the patients and the providers. It has been saving the patients time to commute to the clinic and has also saved their waiting time. The most obvious disadvantage involves the need for clearer and streamlined guidelines and policies for easier implementation of this practice. Also, due to controversies with respect to privacy and security, there is a reluctance from both sides in some cases. Some services of telecommunications run on certain software and hardware that can be quite costly. As the physical examination is limited, a virtual appointment may not seem enough to treat or diagnose the patient.

Conclusion

COVID-19 pandemic has drastically affected Orthopaedic and physical therapy services leading to delay in the patients' treatment and rescheduling of surgeries. Teleconsultation is of limited help in Orthopaedic and Physical therapy practices. Due to lack of physical examination, consulting virtually may not be enough to diagnose or treat a patient. However, it is a safe method of practice during the current global scenario.

Bibliography

1. Coronavirus disease (2019).
2. India declares Covid-19 a 'Notified Disaster'.
3. India Locks Down 1.3 Billion People in Biggest Isolation Effort.

4. Telemedicine Practice Guidelines.
5. Haleem A., *et al.* "Effects of COVID-19 pandemic in the field of orthopaedics". *Journal of Clinical Orthopaedics and Trauma* (2020).

Volume 3 Issue 6 June 2020

© All rights reserved by Anood I Faqih and Vivek M Sodhai.