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# Editorial COVID-19 pandemic and the Olympic Games



COVID-19 pandemic has been caused by Coronavirus, which originated from Wuhan (China) in late December 2019. It has rapidly spread across the entire world affecting more than 210 countries and cause havoc in all the sphere of life including health, daily living and economy. More 4.5 million people confirmed cases of it have been reported so far, and it has consumed nearly 3,00,000 lives<sup>1</sup> and only God knows, how far would it go and when would it finally end. The maximum impact of this pandemic has been in the United States of America, which is almost 12000 km away from the origin of this disease!

It is a big tragedy for the sporting world, that the forthcoming Olympic Games in Japan have been called off due to the disastrous pandemic of COVID-19 and have provisionally postponed for one year, until July 2021. The Olympic Games have never been cancelled due to any medical issue, in the history of these great games.<sup>2</sup> It is a major setback not only to the host country Japan, in terms of massive financial losses, but also to the 11,000 Olympic athletes and 4400 Paralympians which were due to take part in this mega event. The Olympics provide a rare golden opportunity for these top and elite athletes to demonstrate their talent and worth in front of the world and they do very hard preparations and training for it. The postponement and/or cancellation of these Olympic Games would surely jeopardize the professional career of several top athletes. The President of Japan Medical Association have been quoted saying that these games could only be organized next year if the Coronavirus infection is fully controlled not only in the Japan but across the world and if its effective vaccine is developed for the public use.<sup>3</sup>

To highlight and reiterate the importance of sports injuries at the time of Olympic Games, we had planned a special issue on various sports-related injuries and their treatment. But now, we have also included some Orthopaedic related COVID-19 articles, in this issue. There has been a marked upsurge in the COVID-19 related publications of the personal experiences and research related to it in the medical literature. Srinivas et al.<sup>4</sup> have proven it by an exhaustive bibliometric review of the literature from PubMed. Once the COVID-19 pandemic reaches its plateau and starts declining, the Orthopaedic community must get prepared to deliver their services to the acute and non-acute patients with various musculoskeletal and traumatic problems. Iyengar et al.<sup>5</sup> have presented detailed and useful guidelines on how to restart the Orthopaedic services to these patients.

Injuries related to various games are quite common in sports persons. It has more relevance if it involves the elite athletes like those who participate in the Olympic Games, as these are the most prestigious games for these sportspersons. The likelihood of sports-related injuries is high in these elite athletes, as they require doing intense physical exercises, practice, and execution of high performance during the games.<sup>6</sup> Any serious injury to their bones and joints may lead to them to withdraw from their sports for a short or long time and sometimes permanently, thus spoiling their professional career. Hence, it is of paramount importance to identify these injuries early and treat these accurately by the specialist in the field of sports medicine and surgery, because a proper and early treatment of these injuries may enable these athletes to return to their sports after an injury. Return to the similar level of sports after an injury is a major challenge for an athlete and here the role of sports medicine specialists is crucial, as the management, repair techniques, and rehabilitation protocols must be robust to permit the healing of tissues, to allow a high level of performance. Arthroscopic surgery has now become a gold-standard treatment of most joint injuries and is a blessing and boon for the injured athletes. A variety of regenerative treatments are also being offered these days, for quick and satisfactory healing of the sports-related injuries.

From the records of the previous Olympics, it is estimated that in the Olympic games (both summer and winter), around 10–14% of athletes get injuries.<sup>7</sup> According to estimation, 39% of the sports injuries prevented the athletes from participating in competition or training. Women athletes are more prone to sustaining these injuries and suffered 50% more illnesses than men.<sup>8</sup> Severe injuries occur in training and competition, and hence the trained sports specialists' team cover is required during both. Preventative strategies must be implemented for these elite athletes and should be sport-specific, as injury causalities vary.<sup>9</sup> Different sports are associated with different types of injuries patterns. It has been realized that the winter Olympics games are associated with a slightly higher incidence and more severe injuries than the summer Olympic games due to various high-velocity sports played in the winter Olympics like snowboarding and skiing.<sup>10</sup>

It is an irony that despite the injuries sustained by these top elite athletes, there have been a disproportionately smaller number of publications related to these injuries sustained during the Olympic Games. Not only the nature of injuries related to various sports needed to be studied in detail, but also their association with age, sex, race, and geography needs studying in detail.

The knee joint is one of the most commonly involved joints in sports-related injuries. The cruciate ligaments and meniscus are the most commonly injured structures of it. We have included several articles in this special issue related to the cruciate ligament injuries (anterior and posterior). Return to the sports after an anterior cruciate ligament (ACL) injuries have been studies at a follow up of 6–10 years, by et al.,<sup>11</sup> and concluded that despite the recovery of patients after ACL reconstruction during long-term follow-up in athletes, return to sport activity similar to pre-injury in female, older peoples, overweight patients and athletes with chondral lesions were lower. Koc et al.<sup>12</sup> surveyed the arthroscopic surgeons of the Netherland to find out their preferences in doing ACL



Fig. 1. New submissions in the journal of clinical orthopedics and trauma.

reconstruction and its relationship with the return to sports. They found that the majority of the participants of the Dutch Association of Arthroscopy favored the hamstring autografts for primary ACL reconstruction and observed that most participants stated postoperative time and functional performance tests as important criteria to evaluate readiness to return to sport. Srinivas et al.<sup>13</sup> studied the publication trends of posterior cruciate ligament (PCL) in the last 40 years in PubMed and noticed that the trend of publication has been increasing over the last four decades in a significant manner, thus highlighting the importance of treatment PCL injured individuals.

Last but not the least; the COVID-19 epidemic had a positive impact on the research and publications across the world. Most reputed journals have seen dramatic rise in the new submissions (including some COVID-19 related articles) curing the peak of this pandemic, in the last two months. The Journal of Clinical Orthoapedics and Trauma (JCOT) also witnessed a substantial jump of around 160%, in the new submissions (Fig. 1), during this time. The curtailment of clinical practice seems tio be one of the most obvious causes for this jump, as the researchers now have found time to finish writing up their pending work and also could start some new projects. However, it would be interesting to follow if this unprecedented submission rise would sustain or drop down after the resumption of near normal life after this pandemic.

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