



## Editorial



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# In the Era of COVID-19: The Role of Spine Surgeons at the Epicenter of the Outbreak

After emerging a series of pneumonia cases of unknown cause in Wuhan, Hubei, China in December 2019, we are facing a global health crisis of coronavirus disease 2019 (COVID-19) infection, which is a highly contagious disease with a relatively high mortality rate. The World Health Organization declared the COVID-19 as a pandemic on 11 March, 2020, and, as of 30 April 2020, more than 3 million cases of COVID-19 have been reported in all over the world with over 200,000 deaths. Authorities worldwide have responded by implementing travel restriction, quarantines, stay-at-home orders, workplace hazard controls, and facility closures.<sup>1</sup>

Although efforts for the development of treatment are underway, but there are no specific antiviral medications approved for COVID-19 to date.

In South Korea, the first case of COVID-19 was confirmed to have spread on 20 January 2020, but, on February 29, the number of new cases for the day surged to 909, mainly in a specific region due to a single religious group. With all efforts of Korean government and medical staffs, as well as voluntary help of Korean people for the last 2 months, from the last week of April, fortunately, new cases of COVID-19 has reduced to less than 10 cases in a day. So far, South Korea is the only country with a population of over 50 million that has slowed the spread of the virus, and flattened the curve of new infections without shutting down the country nor the city at the epicenter of the outbreak, without imposing an extreme personal travel or movement restrictions.<sup>2</sup>

COVID-19 is a very highly contagious disease, so only one untreated patient can infect hundreds or thousands peoples within couple of days or weeks. It spreads primarily from person to person through small droplets from the nose or mouth, which are expelled when an infected person coughs, sneezes, or speaks.<sup>3</sup> At the initial stage of outbreak, all the efforts have focused on the diagnostic testing of the virus for patient screening, and public education about washing hands, face masks and social distancing. When the new viral infections were exploding in the epicenter of the outbreak, doctors and nurses of many hospital have worked to increase testing capacity for preventing new viral infection, and trace contacts of infected persons. Due to a shortage of medical supplies and hospital beds, elective surgeries should be delayed as much as possible until the epidemic situation is resolved.

Because hospitals performing spinal surgery are also in the middle of the fight against the virus, patients for the planned elective spine surgery were noticed to avoid hospital visit for the probability of the viral infection, and recommended to delay the operation. When medical treatments are needed during the delay, patients have to be requested to take protective measures for the hospital visits, and spine surgeons also need to wear the appropriate personal protective equipment (PPE) for protection. Instead, medications can be pre-



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scribed by the telemedicine.

In case of emergent operations with uninfected patients, spine surgeons should pay special attention to safety to ensure that patients are not infected with the COVID-19 during the stay of the operating room (OR), intensive care unit, and general wards. After operations, inpatient hospital stays must be minimized. When patients are suspected to COVID-19 infection, it is necessary to check whether surgery can be postponed, and if surgery is unavoidable, a confirmatory diagnostic test should be performed to determine whether an infection is present or not.

When operating on COVID-19 infected patients, all efforts are made to minimize exposure to the patient by maintaining as much of a distance as possible, as well as by minimizing medical staff in the OR during the surgery to increase the safety of the operation. Precautionary measures are essentials for minimizing exposure when patients are transferred to and from the OR; such as controlling the setting of the area, designating a patients-only elevator, and negative carrier isolator when possible. During surgery, special attention is necessary to protect the medical staff from the COVID-19 infection using the appropriate PPE.

Under usual circumstances, before the era of COVID-19 pandemic, there are sufficient medical resources for spine surgeons to perform surgeries without special considerations. However, during this crisis, spine surgeons must pay attention not only to our traditional mission in the field of spine surgery, but also to new additional objectives as part of our dedicated efforts to

fight against virus.

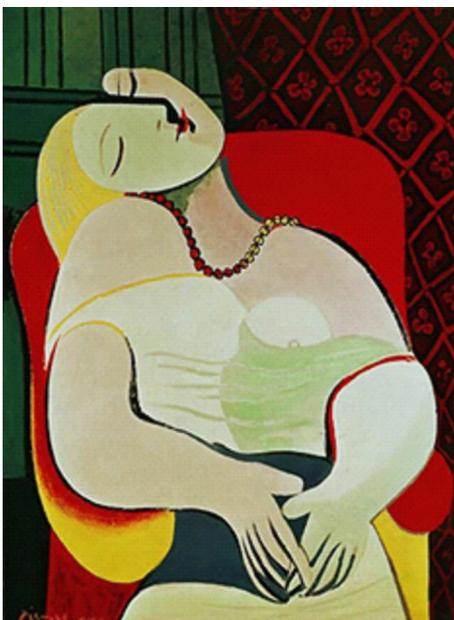
Currently, the COVID-19 pandemic affecting countries all over the world.

It is very difficult to predict how long this situation is continued and the degree to which it will be controlled in the near future. The outcomes will depend on the medical and public health defense system, as well as the combined efforts of medical staff and members of the general public from countries across the globe.

I believe that spine surgeons, as front-line soldiers in the battlefield against the virus, can play an important role in winning this war.

## REFERENCES

1. Johns Hopkins University & Medicine. Coronavirus Resource Center [Internet]. Baltimore (MD): Johns Hopkins University & Medicine; c2020 [cited 2020 May 1]. Available from: <https://coronavirus.jhu.edu/>.
2. Coronavirus Disease-19, Republic of Korea [Internet]. Sejong (Korea): Ministry of Health and Welfare, Central Disaster Management Headquarters; 2020 [cited 2020 May 1]. Available from: <http://ncov.mohw.go.kr/en/>.
3. Yi Y, Lagniton PNP, Ye S, et al. COVID-19: what has been learned and to be learned about the novel coronavirus disease. *Int J Biol Sci* 2020;16:1753-66.



Title: The Dream  
Artist: Pablo Picasso  
Year: 1932

Le Rêve (The Dream in French) is a 1932 oil painting (130 × 97 cm) by Pablo Picasso, then 50 years old, portraying his 24-year-old mistress Marie-Thérèse Walter. It is said to have been painted in one afternoon, on January 24, 1932. It belongs to Picasso's period of distorted depictions, with its oversimplified outlines and contrasted colors resembling early Fauvism. The erotic content of the painting has been noted repeatedly, with critics pointing out that Picasso painted an erect penis, presumably symbolizing his own, in the upturned face of his model.

More information: <https://www.pablopicasso.org/the-dream.jsp>

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