

Guidance Summary: Use of Corticosteroids for Musculoskeletal Pain during the COVID-19 Pandemic

Assembled by the AAOS Committee on Patient Safety

Injectable and oral corticosteroids are commonly utilized to reduce inflammation and provide pain management in the care of patients with musculoskeletal disease. The concern for use of injectable and oral corticosteroids in musculoskeletal care comes from established guidelines for systemic steroid use in patients under treatment for active COVID-19 disease. The National Institute for Health (NIH) has issued [treatment guidelines for Coronavirus Disease](#).¹ Within these guidelines, the NIH provides evidence-based recommendations “against the routine use of systemic corticosteroids for the treatment of mechanically ventilated patients with COVID-19 without acute respiratory distress syndrome (ARDS)” and for “mechanically ventilated adults with COVID-19 and ARDS, there are insufficient data to recommend either for or against corticosteroid therapy in the absence of another indication.” In patients who needed to be on a ventilator, one steroid, dexamethasone, may reduce the death rate in the sickest but not the healthier patient, however, that data is still unclear. The World Health Organization (WHO) [released recommendations](#) stating, “Do not routinely give systemic corticosteroids for treatment of viral pneumonia outside clinical trials.”

There is little definitive evidence to suggest harm in treating asymptomatic patients who may be COVID-19 test unknown or who subsequently test positive for COVID-19 with corticosteroids for musculoskeletal care. To date, there is no published literature addressing harm related to intra-articular steroid injections in the setting of the COVID-19 pandemic. However, given the lack of evidence for or against the use of intra-articular steroid injections, caution is recommended.

The England-based National Health Service (NHS), for instance, released [a clinical guide for the management of patients with musculoskeletal and rheumatic conditions on corticosteroids during the coronavirus epidemic](#).¹ NHS' guidance states:

“Steroids – oral and injected – can be an important and effective treatment for some MSK conditions, particularly rheumatic conditions, some types of arthritis and joint pain. Sometimes these can be lifesaving. Stopping steroids suddenly can be dangerous, and patients should only do so under clinical supervision.

There is concern that steroids can increase risk from the novel coronavirus (COVID-19). Because of this, we should consider alternatives to steroids where possible. If steroids are needed, use the lowest possible dose for the shortest possible time. If people are already taking steroids, see if their dose can be safely reduced. And only give steroid injections for severe symptoms, and where there are no other options.”

Given the lack of clear evidence regarding potential harm with the use of corticosteroids in musculoskeletal care during the COVID-19 pandemic, robust discussion with the patients regarding the potential risks and alternative treatments is critical. Particularly in those patients who are elderly or have multiple medical co-morbidities, this communication is necessary before proceeding with corticosteroid treatment to allow patients to make an informed decision.

As the evidence evolves, the AAOS will continue to update its membership on the most current findings.

References

1. National Health Service. Clinical guide for the management of patients with musculoskeletal and rheumatic conditions on corticosteroids during the coronavirus pandemic, 2020. https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C00043_Specialty-guide-and-coronavirus-MSK-corticosteroid-v1.pdf
2. COVID-19 Treatment Guidelines Panel. Coronavirus Disease 2019 (COVID-19) Treatment Guidelines. National Institutes of Health. Available at <https://www.covid19treatmentguidelines.nih.gov/>. Accessed [06/09/2020].
3. World Health Organization. Clinical management of severe acute respiratory infection (SARI) when novel coronavirus infection is suspected, 2020. <https://www.who.int/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf>