

Suprascapular Nerve Palsy Post COVID-19

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Case Diagnosis

Suprascapular nerve palsy post COVID-19

Case Description

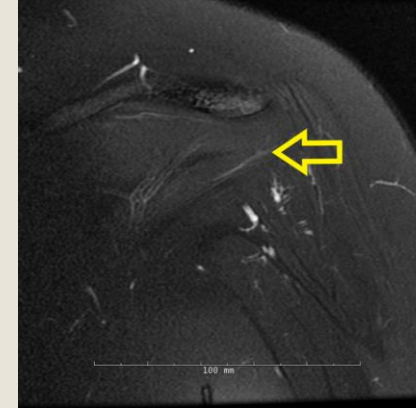
A 34 year old obese female developed severe COVID-19 pneumonia requiring 25 days of intubation (including 7 days prone positioning). During acute rehabilitation she displayed ongoing left shoulder pain and weakness without improvement comparable to her otherwise progressive recovery. Electromyography showed mild spontaneous activity in the left infraspinatus muscle. MRI of the left shoulder showed diffusely increased T2 signal within the infraspinatus muscle as well as increased T2 signal within the left suprascapular muscle. These findings were consistent with suprascapular nerve palsy.

Discussions

At the time of submission, this appears to be the only reported case of suprascapular nerve palsy following severe COVID-19. While many COVID-19 related central nervous system complications are being reported, the peripheral nervous system affects appear under reported. This patient's isolated nerve palsy could be likely mechanical due to prolonged positioning in an ICU setting as suprascapular nerve palsies are common in athletes who experience repetitive trauma related to overhead tasks or compression injuries around the scapula. However, COVID-19 is also associated with inflammation that can affect essentially any organ. Therefore, a suprascapular nerve palsy related to a case of brachial neuritis was also considered as this nerve is well known to be commonly affected by this condition.

Conclusions

This patient survived a life threatening case of COVID-19. While her recovery has been mostly successful, she continues to have left shoulder impairments affecting daily life. At our institution, we have seen a number of COVID-19 recovered patients with varying degrees of upper extremity impairments. Further identifying the underlying pathology of these cases is needed to catalog the specific peripheral nerve injuries and musculoskeletal injuries that are associated with COVID-19 and its treatments. Identification of these injuries will better guide workup and allow providers to create focused, successful rehabilitation plans.



Figures:

Patient's MRI showed suprascapular and infraspinatus tendinosis, suspected SLAP tear and diffusely increased T2 signal in the infraspinatus muscle

References:

1. Ibarra G, Rivera A, Fernandez-Ibarburu B, Lorca-Garcia C, Garcia-Ruano A. Prone position pressure sores in the COVID-19 pandemic: The Madrid experience. 2020; <https://www.clinicalkey.com/#!/content/journal/1-s2.0-S1748681520307324>
2. MICU education committee. Manual Prone Position for Patient's with ARDS. 2020; <https://www.rush.edu/sites/default/files/2020-09/manual-prone-positioning-checklists.pdf>

Disclosures:

None