

COVID-19 Induced Wrist Drop and Bilateral Foot Drop

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Case Description

A 58-year-old female presented to the rehab clinic for evaluation of bilateral foot drop after a three-month hospital course for COVID-19 infection that required intubation and mechanical ventilation. The patient developed stage 2 pressure ulcers bilaterally around the fibular heads, likely due to poor positioning while intubated. Prior to infection, the patient was fully independent with ambulation and had no prior nerve damage. After the infection, she became wheelchair-bound with a bilateral foot drop. She endorsed numbness and tingling in both feet. On physical exam, the patient was noted to have decreased muscle strength in the bilateral lower extremities along with healing pressure ulcers at the fibular heads. Remarkably, she was able to participate in physical therapy where she was able to ambulate short distances with a rolling walker.

Discussion

Foot drop is most commonly caused by compression of the peroneal nerve leading to weakness of the dorsiflexion muscles of the foot. In this case, the development of stage 2 ulcers at the fibular heads could have caused compression of the peroneal nerve leading to foot drop. COVID-19 is a multifaceted, rapidly evolving disease that is not yet entirely well understood. There has been an increasing number of studies associating COVID-19 infection with neurological damage. Treatment options remain the same and include orthotics, splints, physical therapy, nerve stimulation, and surgery in severe cases.

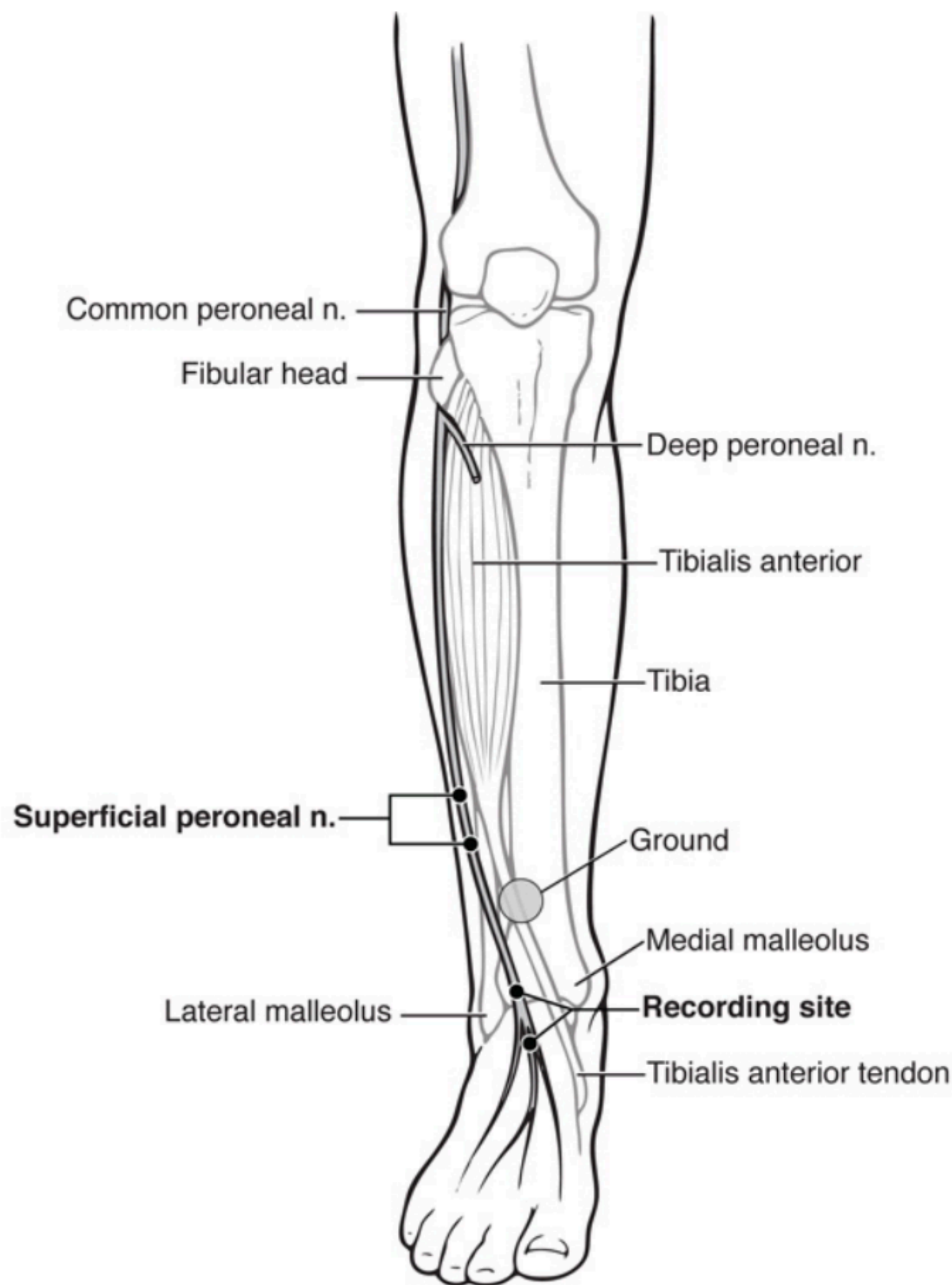
Conclusion

Although there is ongoing research to understand the long-term sequelae of COVID-19, its potential effect on the nervous system should be considered in patients who present with nerve damage post-infection.

Electrodiagnostic studies can confirm the presence and precise location of nerve damage, which would have been the next step in management of the patient in this case.

References:

Leis, Arturo, et al. *Lower Extremity Focal Neuropathies*. Sept. 2012.



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