www.surgicalneurologyint.com

## Surgical Neurology International

Editor-in-Chief: Nancy E. Epstein, MD, Clinical Professor of Neurological Surgery, School of Medicine, State U. of NY at Stony Brook.

SNI: Spine

Editor Nancy E. Epstein, MD Clinical Professor of Neurological Surgery, School of Medicine, State U. of NY at Stony Brook



## Case Report

ScientificScholar<sup>®</sup>

Publisher of Scientific Journals

Knowledge is power

# Case Report (Precis): Two Telemedicine Consultants Miss Foot Drop: When To See Patients in Person

Nancy E. Epstein, M.D.

Clinical Professor of Neurological Surgery, School of Medicine, State University of NY at Stony Brook, New York, United States.

E-mail: \*Nancy E. Epstein - nancy.epsteinmd@gmail.com



\*Corresponding author: Nancy E. Epstein, M.D. Clinical Professor of Neurosurgery, School of Medicine, State University of New York at Stony Brook, United States and 600 Old Country Rd Suite 226, Garden City, NY 11530, USA.

nancy.epsteinmd@gmail.com

Received : 27 August 2020 Accepted : 27 August 2020 Published: 18 September 2020

DOI 10.25259/SNI\_584\_2020

Quick Response Code:



## ABSTRACT

Background: Telemedicine has been rapidly adopted due to COVID-19. In the earliest days, most screenings were performed by primary care/internal medicine consultants; referrals to subspecialists were minimized. Now, as the pandemic has evolved over 6 months, secondary telemedicine consultations should be limited, and earlier involvement of appropriate subspecialists should be reconsidered to optimize patient management.

Case Description: An older individual spoke to an on-call general medical physician with the chief complaint of the acute onset of low back pain after moderately strenuous activity, with severe unilateral radiculopathy. The telemedicine physician recommended a non-steroidal. anti-inflammatory agent without any specific recommendations regarding follow-up. A few days later, with progression of unilateral pain and numbness, a second telemedicine medical consultation was performed; a Medrol dose pack and muscle relaxant were now recommended, again without any follow-up recommendations. Days later, with increased unilateral pain/ near anesthesia in the foot, the patient was seen by a spinal surgeon who found; unilateral SLR positive at 20 degrees, a 0/5 foot drop, loss of the Achilles Response, and decreased pin appreciation in the L5 distribution. The patient's emergent lumbar MR showed a large unilateral disc herniation with inferior migration at the appropriate level, warranting surgical consideration.

Conclusion: Here, we emphasized several points. First, telemedicine may be adequate for the initial screening, but further complaints would be better evaluated in person by either a medical or surgical subspecialist; here, both could have recognized the very clear unilateral foot drop. Second, the patient should have had a scheduled follow-up in-person consultation. Third, appropriate diagnostic studies should have been ordered at the time of the second telemedicine consultation to establish the correct diagnosis and direct treatment.

Key words: Telemedicine Consultation, Spinal Specialist, Medical Specialist, MR Scans, Lumbar Disc, Missed Diagnosis, Patient Evaluation, Foot Drop

### CASE REPORT (PRECIS) **INTRODUCTION**

The introduction of Telemedicine was rapidly adopted out of absolute necessity during the early days of COVID-19. Those screening patient-calls included predominantly primary care and/ or internal medicine physicians, with other subspecialists also taking part as needed. However, now as the pandemic has evolved to the point where the frequency of positivity has markedly decreased in many states, the use of telemedicine should become more circumscribed (i.e. the first consultation via telemedicine, but thereafter an in-person evaluation) in favor of referrals for

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms. ©2020 Published by Scientific Scholar on behalf of Surgical Neurology International

more comprehensive in-person evaluations by appropriate subspecialists.

#### **CASE PRESENTATION**

An older individual without significant comorbidities called the telemedicine on-call general medical physician with the chief complaint of the acute onset of low back pain. This had occurred after moderately strenuous activity, and was accompanied by a unilateral radiculopathy (e.g. patient recounted numbness and tingling). The patient was given a prescription for an anti-inflammatory agent (non-steroidal anti-inflammatory), but not given a follow-up referral either to a medical and/or spinal surgical consultant. After another three days, with further exacerbation of unilateral pain and sensory complaints, the patient again called for a consultation, and was given a second telemedicine consultation with another medical physician. At this point, a Medrol dose pack, and a muscle relaxant were prescribed. However, there was still no recommendation for follow-up/ referral to a neurologist or spinal surgeon, nor consideration of obtaining a MR of the lumbar spine. One week later, with progressive unilateral pian, and near anesthesia involving the foot, the patient, on their own, sought an in-person consultation with a spine surgeon. On examination, SLR was positive unilaterally at 20 degrees, and there was a complete unilateral foot drop (0/5) accompanied by the loss of the Achilles response, and near anesthesia to pin appreciation in the unilateral L5 distribution. The patient was sent for an emergent MR of the lumbar spine that documented a large unilateral disc herniation (i.e. on the symptomatic side) with inferior migration at the appropriate level. This prompted an immediate recommendation for surgery, and the patient was sent to the emergency room.

#### DISCUSSION

There are several points to be emphasized in this commentary. First, telemedicine may be adequate for the initial screening of a complaint, but secondary presentations would be best evaluated in person by a medical physician, or, preferably, the appropriate subspecialist. Second, as the unilateral foot drop was so clear and profound, any physician would have diagnosed the problem that was missed without an inperson neurological evaluation (i.e. using telemedicine). Third, telemedicine consultants should be proactive regarding arranging secondary follow-up visits for in-person assessments, and should consider ordering appropriate diagnostic studies (e.g. in this case, the MR examinations), to better establish the diagnosis, and direct future treatment (e.g. medical and/or surgical therapy).

#### Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

#### Financial support and sponsorship

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

How to cite this article: Epstein N. Case Report (Precis): Two Telemedicine consultants miss foot drop: When to see patients in person. Surg Neurol Int 2020;11:301.