



Letter to the Editor

Response to: Two telemedicine consultants miss foot drop: when to see patients in person

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Dear Editor,

We have read the case report entitled “Two telemedicine consultants miss foot drop: when to see patients in person” by Professor Nancy Epstein published in *Surgical Neurology International* (2020: 11[301]). We want to congratulate the author on this successful article, and offer further congratulations for continuing to practice clinical medicine during a global pandemic.

We wish to make some contributions toward the commentary on the case study. There are two significant issues; (a) the case report does not include clinical examination findings from either telemedicine consult and (b) the telemedicine treatment plan is lacking more than referral for imaging and specialist follow-up. Our concern with this case study is that the issues raised are a reflection on the clinical reasoning and decision-making process of the general physician and not with the medium through which it is delivered.

Telehealth is a viable tool for examining, initiating treatment programs and managing patients with neuromusculoskeletal conditions.^[1] A critical part of the telehealth examination is the patient interview. The research supporting the efficacy of verbal patient interactions through telehealth is robust, as consistently demonstrated in research on telepsychiatry interactions.^[5] In a telephone orthopedic consult, one of authors of this letter (PT) identified a missed navicular fracture and referred for a CT scan, which characterized the suspected injury. We posit that a careful telehealth patient interview should have raised suspicion of a motor deficit or progressive neurological condition. For example, routine questions relating to lower limb strength, sensation, radiating paresthesia, pain, and function should have identified concerning symptoms.

In terms of a physical examination, we acknowledge that there must be adaption to the telehealth medium and engagement to support guided self-examination by the patient. Many aspects of a telehealth mediated physical examination have demonstrated validity and reliability,^[3] although not all physical testing directly translates to the telehealth medium. Nonetheless, an ACL rupture can be diagnosed by telehealth^[4] even though the physical test for this injury requires an in-person review for confirmation. Regarding the case of the missed foot drop, grading ankle dorsiflexion on the Oxford scale is achievable, but not yet verified in the literature through telehealth, with lower grades (0–3) being easier to differentiate than higher grades (3–5). The 0/5 grade reported in this article should have been easily observed. Failing to evaluate power and screening sensation in this case is a clinical oversight, perhaps born by lack of training in telehealth, rather than a failure of the medium itself.

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Rightfully so, the author appears to be upset in that this patient was not referred on to a medical and/or spinal surgical consult, which we agree is a failure of the general medical-physician. We would add that education and advice on prevention would also have been appropriate in this circumstance. However, again we feel this is an issue in the clinical service provided by the medical-physician rather than a failure of the technology *per se*. Provision of onward referral and advice are both trivial through telehealth.

We would like to state that telehealth, like any other new advancement in delivery of healthcare, requires training to both providers and patients in how to manage the interaction to ensure positive outcomes for patients.^[2] It is imperative that practitioners provide clinical medicine within the scope of their current skillset and that they recognize the limitations of each patient interaction no matter by which medium their consultation is undertaken (telemedicine or in-person) and adjust their clinical reasoning and decision-making ability on a case-by-case basis.

Declaration of patient consent

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

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Cottrell MA, Galea OA, O'Leary SP, Hill AJ, Russell TG. Real-time telerehabilitation for the treatment of musculoskeletal conditions is effective and comparable to standard practice: A systematic review and meta-analysis. *Clin Rehabil* 2017;31:625-38.
2. Flodgren G, Rachas A, Farmer AJ, Inzitari M, Shepperd S. Interactive telemedicine: Effects on professional practice and health care outcomes. *Cochrane Database Syst Rev* 2015;2015:CD002098.
3. Mani S, Sharma S, Omar B, Paungmali A, Joseph L. Validity and reliability of Internet-based physiotherapy assessment for musculoskeletal disorders: A systematic review. *J Telemed Telecare* 2017;23:379-91.
4. Richardson BR, Truter P, Blumke R, Russell TG. Physiotherapy assessment and diagnosis of musculoskeletal disorders of the knee via telerehabilitation. *J Telemed Telecare* 2017;23:88-95.
5. Serhal E, Lazor T, Kurdyak P, Crawford A, de Oliveira C, Hancock-Howard R, *et al.* A cost analysis comparing telepsychiatry to in-person psychiatric outreach and patient travel reimbursement in Northern Ontario communities. *J Telemed Telecare* 2020;26:607-18.

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