

CLINICAL VIGNETTE

Importance of Video Telehealth during COVID-19 Pandemic: Identifying Deep Venous Thrombosis

Mark Ovsiowitz, MD and Rebecca Ovsiowitz, MD

Case Presentation

A 59-year-old male veteran was referred to chronic pain clinic for ineffective neuropathic pain control on maximum gabapentin dosing. The referral was placed on April 27, 2020 and the veteran was provided a consultative appointment the following week. He resides over three hours away from the tertiary care facility and he was amenable to complete the visit by video telehealth. His past medical history is significant for multiple medical problems, including coronary heart disease requiring several percutaneous coronary interventions, stroke treated at an outside hospital, diabetes with neuropathy, obesity and post-traumatic stress disorder.

His chief complaint was right leg pain and swelling for the past week that had worsened after a recent cardiac procedure that involved a right groin incision. He reported a super intense pain and a history of chronic burning sensation in bilateral shins. He noted a prior fall in the bathroom two months earlier. He reported a sedentary lifestyle relying on a manual wheelchair, sleeping on his sofa since his bed was too high and using a bedside urinal given his lack of mobility. He did not report any fever, chills, cough, shortness of breath, and no bowel or bladder dysfunction.

His fourteen-year-old daughter was available to facilitate the provider's request for a modified physical examination over the video telehealth visit. The veteran was noted to be sitting up in a wheelchair, able to speak comfortably in full sentences and his right lower leg appeared larger than his left leg. The daughter was able to touch the lower extremities and identify that the right lower leg felt warmer to touch compared to the left leg. The veteran also reported tenderness to palpation at the right posterior calf.

Since his care was done through an outside hospital system, there was no recent imaging, medical records or operative reports available for review in the several systems available to the Veterans Administration Medical Center (VAMC). Given the concern for his recent cardiac procedure, relative immobilization and observation of his physical examination over the video telehealth he was directed to seek additional diagnostic ultrasound to evaluation for deep venous thrombosis. His primary care provider was contacted, and the veteran's daughter helped to take him to the nearest Emergency Department. Follow-up call to the veteran a few days later established per

his report that he had a "DVT" and was prescribed anticoagulation, Xarelto 15mg BID. He stated that he was feeling much better. The veteran's primary care provider was alerted. Subsequent outside report noted doppler ultrasound of the right lower leg demonstrated venous thrombosis from the common femoral vein down to the portal vein. He is followed by a non-VA provider and is currently being managed on triple therapy with Xarelto, Plavix and ASA. He reported that a repeat doppler ultrasound revealed improvement of the clot.

Discussion

During the novel coronavirus COVID-19 pandemic, there has been limited healthcare access for a variety of reasons including but not limited to the need to prepare for potential health care surge, shelter at home orders, individual concerns about exposures, and availability of personal protective equipment. Telemedicine has been available for many years but has not been widely adopted by systems and providers. The current landscape has sparked a necessity for innovative utilization of telehealth which allows for the most vulnerable populations to continue to access healthcare. Advanced technologies allow for improved security whether it be through a telephone visit, electronic mail with attached pictures or a video visit.¹ With COVID, insurance for telehealth has now expanded and allows for reimbursement similar to face-to-face visits.² This case highlights the importance of being able to physically observe a patient through the video feature to facilitate formulating a differential diagnosis which ultimately may have saved this veteran's life.

REFERENCES

1. **Hau YS, Kim JK, Hur J, Chang MC.** How about actively using telemedicine during the COVID-19 pandemic? *J Med Syst.* 2020 Apr 30;44(6):108. doi: 10.1007/s10916-020-01580-z. PMID: 32350626; PMCID: PMC7190457.
2. **Verduzco-Gutierrez M, Bean AC, Tenforde AS, Tapia RN, Silver JK.** How to Conduct an Outpatient Telemedicine Rehabilitation or Prehabilitation Visit. *PM R.* 2020 Jul;12(7):714-720. doi: 10.1002/pmrj.12380. Epub 2020 May 7. PMID: 32297458.