Intraoperative Point of Care Ultrasound Facilitates Diagnosis and Evacuation of Encapsulated Hematoma

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The presented image was a 6 x 6 cm encapsulated hematoma deep to the gastrocnemius muscle with the surgeon’s finger as a reference for size (Figure 1 A/B). The surgery team had a high index of suspicion that an encapsulated hematoma was present in a coagulopathic patient who had previously undergone four-compartment fasciotomy, but despite excellent exposure from the fasciotomy incisions, the team was unable to locate the hematoma. The hematoma was revealed by the anesthesiologist using Point of Care Ultrasound (PoCUS) with a linear probe (13-6 MHz, HFL38, Edge-II®, SonoSite), which was sterilely draped into the surgical field. After localizing the hematoma, a suction catheter was inserted and a total of 250 mL was drained (Figure 1C).

While the gold standard for diagnosing soft tissue pathology is magnetic resonance imaging or computed tomography, both are rarely readily available intraoperatively and having to travel to the imaging suite could delay care and increase costs. PoCUS is a well-established modality for initial evaluation and treatment of soft tissue pathologies in the emergency department and is readily available to many anesthesiologists in the operating theatre. This image highlights a potentially important role for the anesthesiologist, as the person in the operating room who is most likely to be a skilled ultrasonographer. Anesthesiologists could consider more routine use of PoCUS, which some have proposed to be the fifth pillar of physical examination, in the perioperative environment to help guide surgical management of patients with suspected soft tissue pathology.

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