Muscle Herniation Anterior Compartment Lower Extremity With Management via Fasciotomy in a Pediatric Patient

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Muscle herniations of the anterior compartment of the lower extremity occur if increasing compartmental pressure forms a fascial defect. This leads to severe pain in the region, preventing individuals from performing activities of daily living. Weak fascia may be congenital, or tears may result from direct trauma. Both may lead to muscle herniation. Anterior tibialis herniations are uncommon, and a paucity of literature is available on treatment for pediatric patients. This pathology is most likely to occur in young adult male athletes. The affected region may become painful with physical activity if the muscle herniates. If nonsurgical treatment, such as rest, physical therapy, and the use of compression socks, is not successful, then surgical treatment is indicated. Three surgical treatment options are described in the literature: fasciotomy, direct repair, or repair with the use of synthetic grafts/mesh. The authors of this video recommend a fasciotomy because it prevents persistent compartment syndrome and negates the risk of re-herniation. Because no videos of the surgical technique in pediatric patients are available, this video shows the surgical treatment of an 18-year-old woman with a muscle herniation in the anterior compartment of the lower right extremity.