

A CASE REPORT OF RECURRENT ANTERIOR TIBIAL MUSCLE HERNIATION IN MALAYSIA MILITARY-PERSONNEL

¹Ariff Bakri, ¹ Sarmin B, ²MJ Jasni, ¹Rafedon Mahidon
¹Orthopaedics Department, Hospital Angkatan Tentera Tuanku Mizan
²Orthopaedic Department, Universiti Pertahanan Nasional Malaysia

INTRODUCTION:

Muscle herniation is caused by a defect in myofascial causing protrusion of muscle through surrounding fascia. Tibialis anterior hernia is the most common skeletal muscle herniation in the lower limbs mainly occurs in physically active person. We report a case of tibialis anterior muscle hernia in a military-personnel.

REPORT:

27 year old, Malay, serviceman presented with swelling and pain over the right mid-shin started progressively increase in size for the past 3 years. His symptoms worsen upon weight bearing and during intense physical training. On examination there was palpable mass over the right mid-shin, firm, non-tender and immobile. The size of the mass increases upon dorsiflexion of the right ankle. Neurovascular examination was unremarkable.

Our clinical diagnosis was anterior tibialis muscle herniation of the right leg and was confirmed with dynamic ultra-sonographic imaging. He underwent direct repair with Y-knot anchor suture in March 2021. Unfortunately four months later, he had recurrent herniation as he returned to his military trainings. Hence we proceeded with second hernia repair using mesh in September 2021. Intraoperatively, there was anterior tibialis muscle herniating over the previous fascia repair site approximately sizing 3x1cm. The fascia was partially closed with Prolene 4/0 and the defect area was covered with Ethicon monocryl prolene mesh.

Patient was discharged with dorsal slab for six weeks followed by air braces for another six weeks. Patient able to return to his daily military activities and no more complaining pain and swelling over the surgical site.



Conclusion:

Symptomatic muscle herniation can be treated with surgical procedures including direct repair, fasciotomy, and fascial grafting using an autologous graft or synthetic mesh. For patients with chronic and large fascial defects, fascial grafting with an autologous graft or synthetic mesh can be considered.

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