

Back Mice Visualized Using Magnetic Resonance Imaging in a Patient with Lumbar Back Pain

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Abstract

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Keywords: Back mice; Palpation; Magnetic resonance imaging; Musculoskeletal ultrasound

Introduction

Lower back pain (LBP) is a common condition and the leading cause of years lived with disability in both developed and developing countries [1,2]. Several conditions may cause LBP, but in most patients a specific pain-generator cannot be diagnosed, and the condition is defined as non-specific [1]. However, in cases with a pathoanatomical pain-generator, correct diagnosis is essential to initiate a targeted treatment. Back Mice (BM) is a cause of LBP which have been described in both clinical and surgical literature [3-5]. BM is single or multiple fatty nodules of variables size located especially in the lumbar region. It has been proposed that the incidence of BM is 16% in the general population [6]. Mainly, the description of BM comes from

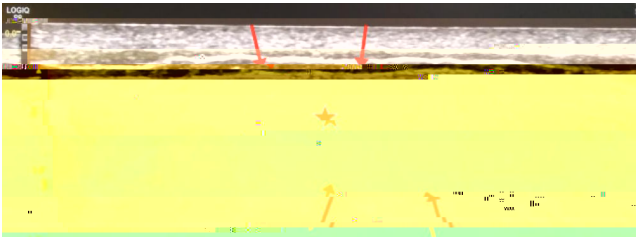


Figure 2 Longitudinal sonographic image of right-sided subfascial fat herniation (Back Mice) in a 67-year-old male, Star = herniated fat, Arrows = superficial and deep fascia.



Figure 3 Magnetic resonance imaging (MRI) of the lumbar region in different sequences. A capsule containing fish oil was placed on the skin on top of both back mices (BM), A: Coronal T1-sequence with capsule surrounding the BM especially on the right side, B: Sagittal T1 fast spin echo (FSE) sequence illustrating corresponding fat lobuli, C: Axial short tau inversion recovery (STIR) sequence showing inflammation in the BM especially on the right side.

The patient was treated with local anesthetic and corticosteroids (2 ml Betamethasone and 3 ml Lidocaine) injected directly into both BM. Total pain relief was instantly obtained and the patient was pain free for 3 weeks. The injection has been repeated 2 times with similar effect.

Discussion

BM is caused by herniation of subfascial fat through a defect in the thoracolumbar fascia. When the fatty tissue is pedunculated the tissue