

ABSTRACT OF PAPERS FOR FULL MEMBERSHIP

BONE AND JOINTS

Imaging of muscle edema

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Introduction: Muscle edema (ME) is characterized by an increase in free water content. It can occur as a consequence of numerous causes. MRI is the most powerful technique to detect ME using fat suppressed (FS) T2-weighted images (WI) or STIR sequences. ME can be subdivided according to distribution of the lesions. Diffuse (bilateral muscle involvement), focal (one or a contiguous group of muscles involvement) and multifocal (involvement of multiple remote muscles) ME patterns can be distinguished (1, 2).

Objectives: The objectives of this study are twofold: (1) to determine the most frequent etiology of ME; (2) to present a pictorial overview of the ME pattern and to illustrate the complementary value of FS T2- and T1-WI.

Materials and methods: From June 2005 until February 2012, 13800 musculoskeletal MR examinations were performed in our institution of which 2364 MR studies were included in the scientific database. Every MR study was labelled with a radiological diagnosis and/or specific keyword(s). ME was evaluated on (FS) T2-WI. Atrophy and fatty infiltration were evaluated on T1-WI. In our series, 116 cases were identified on FS T2-WI, 9 cases with ultrasound (US), 1 case with US and additional computed tomography (CT) and 1 case with CT only.

Results and discussion: The following etiologies were found in our series: traumatic (n = 106), denervation (n = 11), inflammatory (n = 6), infectious (n = 3) and metastasis (n = 1). Proportions were respectively 83%, 9%, 5%, 2% and 1%. The distribution of the ME pattern was the following: diffuse (n = 1), focal

(n = 123) and multifocal (n = 3). In all cases of denervation ME (n = 11), there was a variable grade of muscle atrophy and fatty infiltration. T1-WI were most helpful in case of denervation edema and may add additional information regarding chronicity and reversibility.

Conclusion: The two most frequent etiologies of ME are traumatic and denervation. The focal ME pattern is mostly seen, which is in line with the preponderance of the traumatic etiology of ME in our series.

References

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CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGY

Embolization of a congenital extrahepatic portosystemic shunt ... in a 70-year-old patient

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The authors describe the percutaneous therapeutic occlusion of a congenital

extrahepatic portosystemic shunt (CEPS) in an elderly patient suffering from ammonia encephalopathy. A review about this unusual pathology and its pathogenic origins is made, and highlights that when a therapeutic intervention is indicated, the less invasive should be considered first. With detachable coiling, a safe and durable closure of this kind of shunts is achievable, without surgery.

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Embolization of an unexpected finding in a VHL patient

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The authors report their experience with the diagnosis and the therapeutic embolization of a pelvic extramedullary hemangioblastoma in a young woman suffering from Von Hippel Lindau disease (VHL).

To the best of the knowledge of the authors, this is the first ever described case of a pelvic hemangioblastoma, and also the first reported description of therapeutic embolization in this localization.

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