Case report:

Imaging features of Parosteal lipoma of the femur: case report

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Abstract:
Lipomas may be defined as benign lesions of mature adipose tissue without evidence of cellular atypia. Lipomas are the most common soft tissue lesions and surprisingly are among the rarest bone neoplasias. Herewith we presented a case of 25-year-old female patient noticed a swelling over her right thigh, without associated pain, approximately 3 years ago. In 2014 she was referred to our OPD, and the clinical evaluation revealed a nonpulsatile mass in the anteromedial aspect of the distal two-thirds of the right thigh that had a solid consistency and regular contour adhered to the deep planes and that was painless upon diffuse palpation.

Introduction

Lipomas may be defined as benign lesions of mature adipose tissue without evidence of cellular atypia. Lipomas are the most common soft tissue lesions and surprisingly are among the rarest bone neoplasias. Osseous lipomas have been classified according to their site of origin: either within bone (intraosseous) or on its surface (juxtacortical). Surface osseous lipomas are subdivided into parosteal and subparosteal lipomas. The parosteal type is a rare tumor accounting for 0.3% of all lipomas, usually asymptomatic. The most frequent complaints are a tumoral convexity presenting as a visible or palpable mass or a mild-intensity pain.

The present poster describes a rare case of parosteallipoma located in the femur, without hyperostosis.

Case report

A 25-year-old female patient noticed a swelling over her right thigh, without associated pain, approximately 3 years ago. In 2014 she was referred to our OPD, and the clinical evaluation revealed a nonpulsatile mass in the anteromedial aspect of the distal two-thirds of the right thigh that had a solid consistency and regular contour adhered to the deep planes and that was painless upon diffuse palpation.

High resolution ultrasonography revealed a 10 x 4 cm sized heterogeneously hyperechoic solid natured mass lesion seen within the deep intermuscular plane adjacent to the distal 1/3rd of left femur. This lesion is non compressible and does not show any vascularity on colour Doppler study. There are multiple linear hyperreflective striations noted parallel to skin surface.
Conventional radiographs of the right thigh showed the presence of an increase in the amount of soft tissue with a radiodensity characteristic of fatty tissue in the anteromedial face of the distal region of the femur.

Computed tomography of the right thigh showed a homogeneous soft tissue density mass lesion with density similar to that of subcutaneous tissue in the intermediate vastus muscle topography, suggesting fat replacement seen located in the antero-medial region of the distal third of the femur around metadiaphyseal junction, without rupture of the cortical or bone marrow invasion.
In the MRI of the right thigh, we observed an expansive process measuring 19 x 8 x 9 cm with hypersignal in T1 and T2W images and suppressed on STIR images around the distal femur under the intermediate vastus muscle in the metadiaphyseal region of the femur.

References: