Infarction of Torsed Lipomatous Appendage of the Falciform Ligament

Enfarte de apêndice lipomatoso torcido do ligamento falciforme

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Abstract
A 46-year-old man presented sudden onset of severe pain in the right upper quadrant. On abdominal examination, a well-defined point of focal tenderness and a subtle lump were evident. Abdominal x-ray, ultrasound and laboratory tests were unremarkable. An abdominal CT scan was then requested, showing fat stranding and a torsed appearance of a lipomatous appendage of the falciform ligament, compatible with infarction. The pathophysiology of this entity is similar to the more commonly seen omental infarction and epiploic appendagitis, covering the spectrum of intra-abdominal focal fat infarction, recently described in literature.

Keywords
Infarction; Lipomatous appendage; Falciform ligament.

Resumo
Homem de 46 anos, apresentando forte dor súbita no hipocôndrio direito. Na avaliação abdominal evidenciava-se um ponto álgico e pequena tumefação bem definidos. Radiografia abdominal, ecografia e exames laboratoriais sem alterações dignas de registo. Foi então solicitada uma tomografia computadorizada abdominal, demostrando sinais inflamatórios e aspetos de torção num apêndice lipomatoso do ligamento falciforme, compatível com enfarte. A fisiopatologia desta entidade é semelhante ao enfarte omental mais comumente observado e à apendicite epiploica, abrangendo o espectro do enfarte focal de gordura intra-abdominal, recentemente descrito na literatura.

Palavras-chave
Enfarte; Apêndice lipomatoso; Ligamento falciforme.

A 46-year-old male presented sudden onset of severe pain in the right upper quadrant. On abdominal examination, a well-defined point of focal tenderness and a subtle lump were evident. Abdominal x-ray, ultrasound and laboratory tests were unremarkable. An abdominal CT scan was then requested, however, the report from an outsourced company suggested normal findings. After revision, the following morning, by a local attending radiologist and multidisciplinary discussion, the diagnosis was performed with ease. CT showed fat stranding in a lipomatous appendage of falciform ligament compatible with infarction (Fig.1 and 2). Although without surgical or histopathological proof, the similarities with other reported cases are striking.

The pathophysiology of this condition is similar to the more commonly seen omental infarction and epiploic appendagitis, encompassing the spectrum of intra-abdominal focal fat infarction (IFFI) that has recently been described.

Figure 1 – Axial CT image showing fat stranding in a lipomatous appendage of the falciform ligament compatible with infarction. The surrounding inflammatory changes in the adjacent fat and myofascial planes give rise to a subtle focal cutaneous lump, evident if we compare it with the contralateral side.
Figure 2 – Sagittal CT image depicting the longitudinal extent of the lipomatous appendage and the mass effect on liver surface with a prominent inward bulging. Also in better detail the extent of the fat stranding, and the “dot sign”, as similarly described by Uyttenhove F et al. in their case report3, caused by thrombosis of the vessels in the center of the lipomatous appendage.

References