Radiology Case Reports 000 (2018) 1–5

Available online at www.sciencedirect.com
ScienceDirect
journal homepage: www.elsevier.com/locate/radcr

Case Report

Pancreatic desmoid tumor: A rare case with radiologic–pathologic correlation

Dr. Frederic Bedard Dallaire, MD[a,1,*], *Dr. Etienne Dallaire, MD*[b], *Dr. Martine Perigny, MD*[c]

[a] *CHU de Quebec, Quebec, Canada*
[b] *Saint-Francois d'Assise Hospital, CHU de Quebec, Quebec, Canada*
[c] *Chief of the anatomic pathology department, Hotel-Dieu hospital, CHU de Quebec, Quebec, Canada*

ARTICLE INFO

Article history:
Received 9 March 2018
Revised 12 April 2018
Accepted 13 April 2018
Available online xxx

Keywords:
Desmoid tumor
Pancreatic tumor
Solid tumor
Partial pancreatectomy
Pancreatic tail
Immunohistochemistry

ABSTRACT

A 39-year-old female patient was referred to our tertiary oncologic center for additional investigations relating to a suspect pancreatic tail lesion. An abdominal computed tomography scan and magnetic resonance imaging scan showed a solid lesion demonstrating progressive enhancement. Complete resection was obtained and the final diagnosis was that of a desmoid tumor of the pancreas, an exceptionally rare tumor demonstrating overlap with other solid and cystic lesions of the pancreas [1]. Therefore, it is important to recognize the essential role of pathology, particularly immunohistochemistry, in identifying this tumor. The high rate of postsurgical recurrence should prompt repeated follow-ups considering the potential aggressive nature of desmoid tumors.

1. Case report

A 39-year-old female patient who complained of left flank pain was referred to our surgical oncologic team for assessment of a pancreatic tail lesion discovered following an abdominal ultrasound. Patient was known for a history of non-Hodgkin lymphoma treated with chemotherapy 6 years prior. A magnetic resonance imaging was first requested to further characterize the lesion. The report described a large mass ($6.7 \times 5.2 \times 5.7$ cm) centered on the tail of the pancreas. This lesion was hyperintense with a hypointense nodular capsule on T2-weighted images and heterogeneous, predominantly hypointense, on T1-weighted images (Figs. 1a and b). After gadolinium injection, the lesion demonstrated progressive enhancement on the venous and late phase, being maximal on the latest (Figs. 2a and b). The lesion showed mass effect on the splenic vein, which remained permeable, and the pancreatic duct which was dilated upstream. The rest of the pancreas was normal. Diagnostic differential included a neuroendocrine tumor or a pseudopapillary tumor of the pancreas. Characteristics were not typical of a lymphoma and no lymphadenopathy was seen.

* Corresponding author.
E-mail address: Frederic.bedard-dallaire.1@ulaval.ca (Dr.F.B. Dallaire).
[1] Present address: Saint-Francois d'Assise Hospital, CHU de Quebec-Universite Laval, 10 Rue de l'Espinay, Ville de Québec, QC G1L 3L5, Canada.

https://doi.org/10.1016/j.radcr.2018.04.025

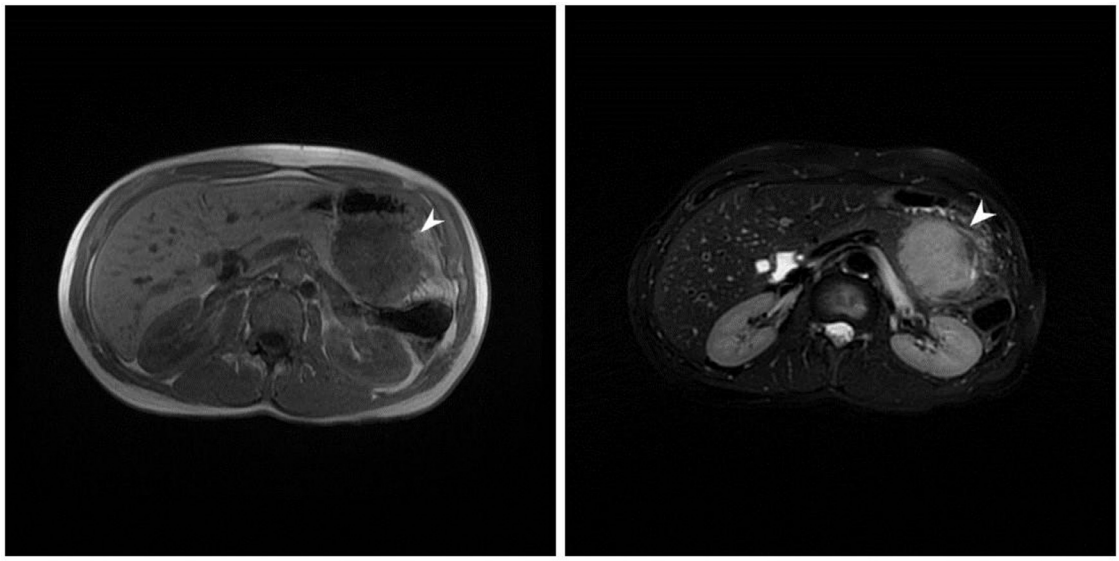

Fig. 1 – Axial T1-weighted (a) and fat-suppressed T2-weighted (b) magnetic resonance images.
A large mass is seen centered on the tail of the pancreas (arrowhead). This lesion was hyperintense with a hypointense nodular capsule on T2-weighted images (a) and heterogeneous, predominantly hypointense, on T1-weighted images (b).

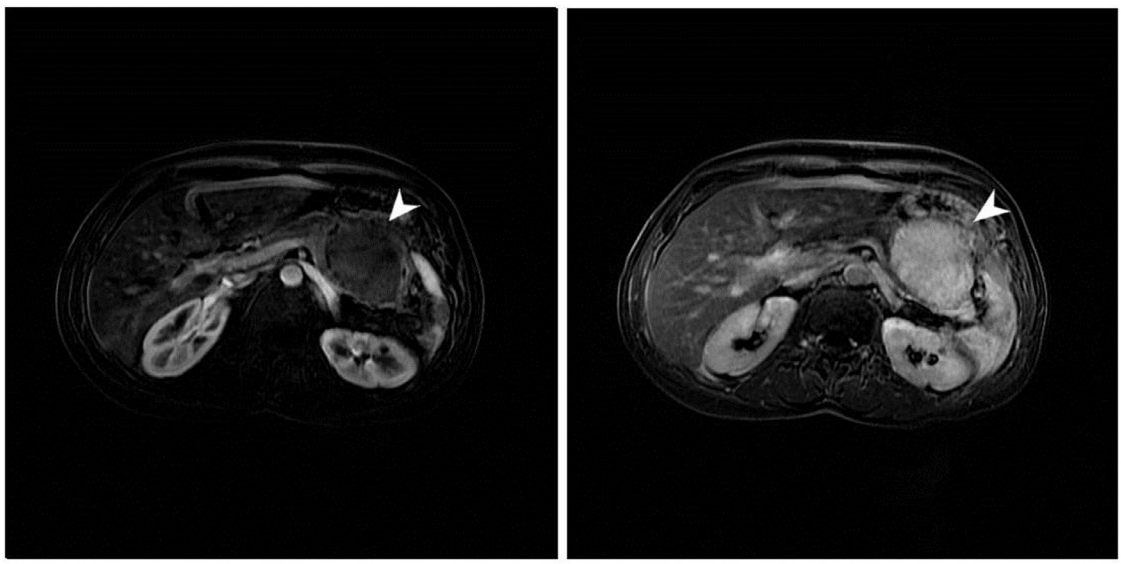

Fig. 2 – Axial T1-weighted fat-suppressed subtraction magnetic resonance images after contrast administration during the arterial (a) and late (b) phases.
After gadolinium injection, the lesion (arrowhead) demonstrated progressive enhancement on the venous (a) and late phase (b), being maximal on the latest.

An octreotide radionuclide scan was recommended following the diagnostic hypotheses, which showed no uptake by the pancreatic mass or at a distant site, thus making the diagnosis of a neuroendocrine tumor less probable. A thoraco-abdominal computed tomography (CT) scan was performed to complete the staging. No signs of metastases were found. The tumor was described as a solid homogenous mass, slightly hypodense compared to the muscles, with no calcifications or cystic components (Fig. 3). After contrast administration, it showed a heterogeneous, predominantly hypovascular enhancement pattern, with an enhancing nodular capsule (Fig. 4a). The venous and late phases showed a

Please cite this article as: Dr. Frederic Bedard Dallaire et al., Pancreatic desmoid tumor: A rare case with radiologic–pathologic correlation, Radiology Case Reports (2018), https://doi.org/10.1016/j.radcr.2018.04.025