Ectopic pancreatic tissue in the jejunal mesentery

S. Borghol, B. Diris, N. Alberti, A. Crombe, F. Laurent

Department of radiology of the gastrointestinal and endocrine systems, Hôpital du Haut Lévêque, avenue de Magellan, 33604 Pessac, France
Department of radiology, Hôpital Saint-André, 1, rue Jean-Burguet, 33000 Bordeaux, France

Case report

A 65-year-old man attended our centre for the first time for the follow-up of a Lieberkühnian adenocarcinoma of the right colon, which had been in remission since surgical intervention four years previously. The patient, who had no other remarkable medical history, was clinically asymptomatic and laboratory tests showed no abnormalities. More specifically, there was no increase in serum CEA and CA19.9 levels which had been raised prior to surgery.

As part of the follow-up of colon cancer, computed tomography (CT) examination (Figs. 1–3) and a positron emission tomography scan with fluorodeoxyglucose (18F-FDG PET-CT) (Fig. 4) were performed.

DOI of original article: http://dx.doi.org/10.1016/j.diii.2015.01.010

Here is the answer to the case incidental abdominal mass during the follow-up of colon cancer after treatment previously published. As a reminder we publish again the entire case with the response following.

* Corresponding author. 29 bis, rue Chauffour, 33000 bordeaux, France.
E-mail address: sophieborghol@gmail.com (S. Borghol).

http://dx.doi.org/10.1016/j.diii.2015.01.009
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Figure 1. Abdominal CT examination in the axial plane during the arterial phase.

Figure 2. Abdominal CT examination in the sagittal plane during the enteric phase.

Figure 3. Abdominal CT examination in the coronal plane during the enteric phase.

Figure 4. 18F-FDG PET-CT examination.

**What is your diagnosis?**

In light of the information from the case report and the results of imaging examinations, what diagnosis is the most plausible from among the following items:

- ectopic pancreatic tissue;
- gastrointestinal stromal tumour (GIST) of the jejunum;
- peritoneal leiomyoma;
- lymphoma of the small bowel;
- accessory spleen.

**Diagnosis**

Ectopic pancreatic tissue in the jejunal mesentery.

**Description of the images**

CT revealed a 3-cm mass adherent to a proximal jejunal loop (Fig. 5). There was no mass effect on the adjacent structures, infiltration of the mesentery, or enlarged peripheral 18F-FDG PET-CT examination.
lymph nodes. The morphological features and enhancement pattern during the enteric phase were similar to those of the pancreas, that is, a lobulated appearance and homogenous contrast uptake (Figs. 6 and 7). The pancreas was normal. The 18F-FDG PET-CT performed for colon cancer monitoring showed no increased uptake by the mass, nor any other area of increased uptake, which meant that a tumour-related lymph node enlargement could be excluded (Fig. 8). Review of prior CT examination showed that this abnormality had remained unchanged since the beginning of follow-up. In view of these morphological features, the enhancement pattern and disease progression, the diagnosis retained was that of uncomplicated ectopic pancreatic tissue of the mesentery. In view of the patient’s lack of symptoms and the absence of disease progression on follow-up imaging, there was no need for any further investigation.

Figure 6. Abdominal CT examination in the sagittal plane during the enteric phase confirms presence of an oblong mass (arrow) with a large interface (star) with jejunal loop. The mesenteric aspect of the mass is thinner than the jejunal aspect and has no connections with adjacent organs.

Figure 7. On abdominal CT examination in the coronal plane during the enteric phase, no communication between the mesenteric mass (arrow) and the orthotopic pancreas (star) is visible.

Discussion

Ectopic pancreatic tissue can be due to a congenital developmental abnormality or to an acquired abnormality through glandular metaplasia of the intestinal submucosa [1]. Although it affects the gastrointestinal tract in 2–15% of autopsies with a predilection for the walls of the stomach (30%), duodenum (30%), or jejunum (20%) [2], mesenteric involvement is exceedingly rare [3,4]. This presentation has specific features that it is important to be aware of so that unnecessary investigations may be avoided. As in our case, it is often an incidental finding and complications, such as pancreatitis, ulceration of the mucosa with gastrointestinal haemorrhage, intestinal obstruction or degeneration are very rare [2].

Ectopic pancreatic tissue in the mesentery presents in the form of large masses measuring between 3 and 5 cm along the longest axis that are oblong, develop outside the lumen, with one hypertrophic surface adhering to the gastrointestinal wall and are most often found in the jejunum. The rest of the parenchyma narrows towards the mesentery, without communication with the intestine or pancreas. Characteristic features are lobulations similar to those of the normal pancreas in its usual position but the enhancement pattern seen on the arterial and enteric phases is not always the same, and varies depending on the proportion of islets of Langerhans, acini and ducts. As a rule, a fine central pancreatic duct is visible and this allows for exclusion of the main differential diagnoses, such as gastrointestinal stromal tumour (GIST), leiomyoma, lymphoma, or even a splenotic nodule, which all require particular management [5].

If the diagnosis remains uncertain, MR imaging can be used to further characterize the mass, in particular through the use of diffusion-weighted sequences [6].

On the opposite, ectopic pancreatic tissue of the gastrointestinal tract presents as a smaller mass (less than 3 cm), with a flat or oval appearance that originates in the wall, from the submucosa (or more rarely the subserosa). It can affect the whole small bowel and, in very rare cases, Meckel’s diverticulum or the colon [2,7].
Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

References


