Dorsal pancreatic agenesis: description of CT signs

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DESCRIPTION
Agenesis of the dorsal pancreas is rare and is characterised by the absence of the body and tail of the pancreas.1 Patients with agenesis of the dorsal pancreas often present with non-specific abdominal symptoms and very often it is an incidental finding. However, in approximately 50% patients, associated hyperglycaemia is noted.2

Two useful signs (dependent stomach sign and dependent intestine sign) are described in multidetector CT (MDCT) for differentiation of the distal pancreatic agenesis from other differentials such as pancreatic lipomatosis and atrophy of the pancreas.3 In cases of distal pancreatic lipomatosis, abundant fat tissue is seen anterior to the splenic vein. Similarly, pancreatic atrophy shows fatty replacement anterior to the splenic vein. In contrast, in cases of distal pancreatic agenesis, the distal pancreatic bed is occupied by the stomach or intestine, which abuts the splenic vein.3

We present the CT imaging of a 60-year-old man in whom dorsal pancreatic agenesis was incidentally detected. The CT scan (figure 1) revealed the absence of the body and tail of the pancreas with ‘dependent stomach sign’ and ‘dependent intestine sign’, which were seen as stomach and small bowel loops lying in the distal pancreatic bed directly anterior to the splenic vein.

Learning points
The dependent stomach sign and dependent intestine sign are hallmarks of dorsal pancreatic agenesis, differentiating it from pancreatic atrophy and pancreatic lipomatosis.

Competing interests None declared.

Patient consent Obtained.

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REFERENCES

Figure 1 Axial (A and B) and coronal (C) contrast-enhanced CT images revealing complete absence of the pancreatic body and tail s/o complete dorsal pancreatic agenesis. The dorsal pancreatic bed was occupied with small bowel loop and stomach (white arrow in (A) and (C), which lie in close relation to the splenic vein—‘dependent stomach sign’ and ‘dependent intestine sign’. The pancreatic head and uncinate process is well developed and seen normally (arrow in (B)).