Case Report

A rare case of agenesis of dorsal pancreas

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International Archives of Integrated Medicine, Vol. 3, Issue 6, June, 2016.

Available online at http://iaimjournal.com/
ISSN: 2394-0026 (P) **ISSN: 2394-0034 (O)**
Received on: 14-05-2016 **Accepted on:** 25-05-2016
Source of support: Nil **Conflict of interest:** None declared.
How to cite this article: Gupta K, Rathwa AM, Singla H, C. Raychaudhuri. A rare case of agenesis of dorsal pancreas. IAIM, 2016; 3(6): 211-212.

Abstract

Dorsal pancreatic agenesis is an extremely rare congenital entity. Very few cases have been published in the literature about this congenital anomaly. Agenesis of the dorsal pancreas is associated with various anomalies, such as polysplenia syndrome, wandering spleen, interruption of the inferior vena cava, hemiazygos and azygos continuation, symmetrical liver, anomalous hepatic fissure or lobe, left-sided inferior vena cava, median gall bladder, inverted gallbladder and stomach, and intestinal malrotation. We have reported here an asymptomatic 31 year old male with incidental findings of hypoplasia of pancreatic body and absence of pancreatic tail on contrast enhanced abdominal computed tomography (CT) and similar findings were seen on Magnetic resonance imaging (MRI). Further Magnetic resonance cholangiopancreatography (MRCP) was done on which hypoplastic proximal MPD at body of pancreas with complete absent of MPD at tail region noted. The final diagnosis was dorsal pancreatic agenesis.

Key words

Pancreatic anomalies, Pancreatic agenesis, Pancreatic body hypoplasia, MRCP.

Introduction

Complete agenesis of the dorsal pancreas is an extremely rare condition. Partial agenesis of the dorsal pancreas is observed more commonly than ventral agenesis. It is usually an incidental finding, resulting from an embryological failure of the dorsal pancreatic bud to form the body and tail of the pancreas. A short, rounded pancreatic head vicinal to the duodenum is appreciated in partial dorsal pancreatic agenesis with absence of the pancreatic neck, body and tail. Hypoplasia of pancreatic body with remnant duct of Santorini and presence of minor duodenal papilla may be seen in partial dorsal agenesis of pancreas. The neck, body, tail of the pancreas, the duct of Santorini and the minor duodenal papilla are all

absent in complete agenesis of the dorsal pancreas [1, 2].

Case report

A 31 year old male patient presented with complaints of pain abdomen since four months, for which his CT abdomen and pelvis with contrast using 16 slice CT scanner was done. Multiple calculi were seen in left kidney with hydronephrosis, along with that an incidental pathology was observed in pancreas in the form of absence of pancreatic tail and hypoplasia of pancreatic body. CT findings were confirmed by MRI and MRCP using 1.5 tesla MRI scanner (**Figure – 1**, **Figure – 2**). No objection certificate was taken from Sumandeep Vidyapeeth Institutional Ethics Committee (SVIEC).

Figure - 1: (CT Pancreas**)** absence of pancreatic tail and hypoplasia of pancreatic body.

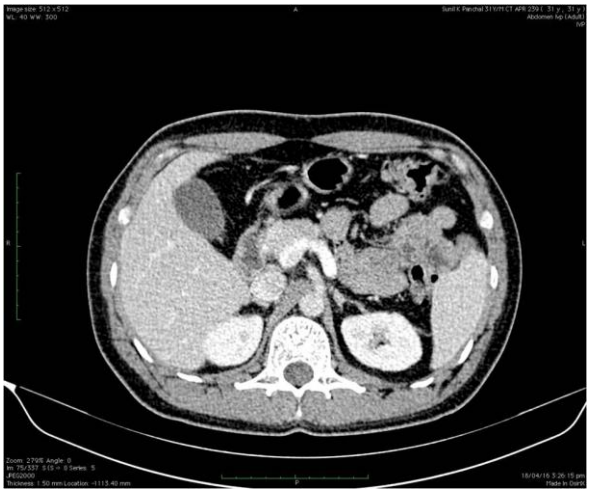
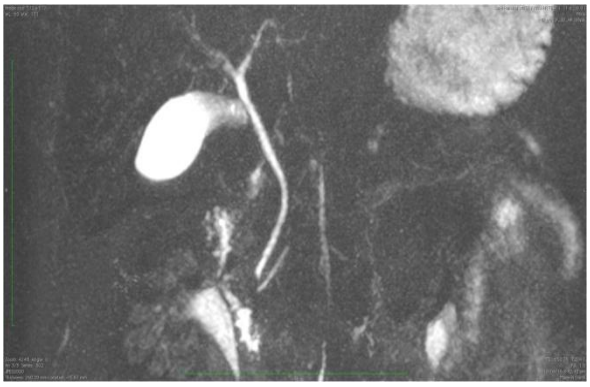


Figure - 2: (MRCP) Hypoplastic proximal MPD at body of pancreas with complete absent of MPD at tail region.



Discussion

Agenesis of dorsal pancreas can be associated with other pathologies like hyperglycemia, solid-pseudopapillary tumor of the pancreas, polysplenia, pancreatitis, wandering spleen, interruption of the inferior vena cava, hemiazygos and azygos continuation, symmetrical liver, anomalous hepatic fissure or lobe, left-sided inferior vena cava, median gall bladder, inverted gallbladder and stomach, and intestinal malrotation [3, 4].

Hence, these should be suspected. However, in our case none was present and it presented as completely asymptomatic incidental solitary finding. No treatment was required for this finding in our patient and surgical management for renal calculi was done.

References

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