



General Surgery

A RARE CASE OF ADENOMYOMATOUS HYPERPLASIA OF AMPULLA OF VATER MIMICKING AS PANCREATIC HEAD MASS

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ABSTRACT Adenomyomatous hyperplasia is an extremely rare lesion encountered in the ampulla of Vater. Less than 50 cases have been described, most of them with clinical consequences of biliary obstruction and misdiagnosing it as a malignancy. Patient underwent extensive surgery pancreatoduodenectomy . There is no accurate diagnostic tool to differentiate the benign nature of adenomyomatous hyperplasia. More extensive operations are often performed due to its malignant nature.

KEYWORDS :

INTRODUCTION

Benign tumors constitute 6% of all extrahepatic biliary tree neoplasms and are responsible for 0.1% of all biliary tract operations [1] . Adenomyomatous hyperplasia (AH) can occur anywhere in the gastrointestinal tract. It is an extremely rare benign lesion of the extrahepatic biliary tree, more often encountered in the gallbladder, but only a few cases have been described in the ampulla of Vater.

Although adenomyomatous hyperplasia is a rare extrahepatic biliary benign tumor, it should be considered in the differential diagnosis of patients with obstructive jaundice or cholangitis. Higher frequency was noted in a post-mortem specimens study, in which 54% of 100 unselected patients had this lesion, with no clinical significance.[2]

The histopathogenesis and natural history of these lesions in the common bile duct (CBD), including the ampulla of Vater, is not clear. Diagnostic tools, including endoscopy with ultrasonography and biopsy, are frequently not accurate enough to rule out a malignancy, and these diagnostic difficulties have led to extensive operations. The appropriate management of these tumors is not established.

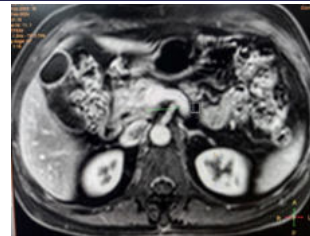
Unlike the other counterparts in the gastrointestinal tract, the ampulla of Vater's tumors is responsible for the biliary obstruction, which leads to significant clinical consequences. Jaundice and abdominal pain are the main complaint.

CASE STUDY

51Y old male referred from peripheral hospital with preliminary investigations and CECT abdomen and pelvis report. Patient had jaundice since 1 month , epigastric pain since 1 month (aggravated since 1 week), fever since 1 week and not associated with vomiting, on examination patient had visible icterus and epigastric full ness with mild tenderness and total counts 14000, liver function test showing total bilirubin 6.02 mg/dl direct bilirubin 3.25 mg/dl, with ALP 518 IU/L, SGOT,SGPT normal. S.amylase 44 U/l. CA 19-9 -36.2 U/ml. patient had signs of cholangitis so empirical antibiotics started. And under went biliary drainage procedure.

CECT (A+P) showing – 3.4x3.1x2.8 cm mildly enhancing soft tissue density lesion noted in head, neck and uncinate process of pancreas resulting into abrupt cut off of MPD with resultant upstream dilatation of CBD.

MRCP , 3.5x3.2x3.8 cm sized well defined solid lesion showing restricted diffusion noted in the head, neck and uncinate process with moderate post contrast enhancement on DCE. Moderate central and peripheral IHBRD. 8x8 mm peripancreatic lymphnode see. Above features are likely suggestive of neoplastic etiology s/o adenocarcinoma of pancreas.

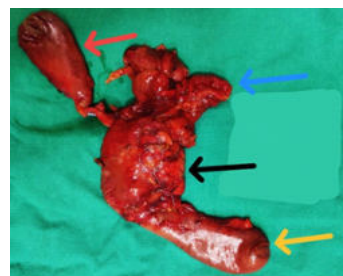


MRCP - Heterogenous mass at head of pancreas.

Endoscopic ultra sound guided fine needle aspiration cytology was done, which was showing extensive desmoplasia . Patient had been planned for PTBD and followed by Pancreaticoduodenectomy (Whipple's procedure). Post surgery patient was stable and discharged in subsequent days.

Gross specimen – No grossly palpable nodule or mass on pancreatic head.

Hystopathologic specimen showing cystically dilated gland with surrounded by muscle fibers, fibroblast, varying amount of mononuclear inflammatory cells. No evidence of malignancy.[3]



Pancreatocoduodenectomy specimen (Red arrow –gallbladder, blue arrow –pylorus of stomach ,black arrow –D2 with pancreatic head , yellow arrow –jejunum.)

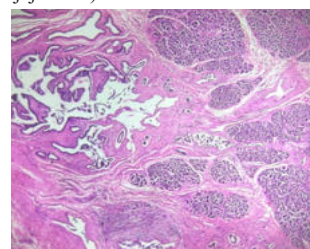
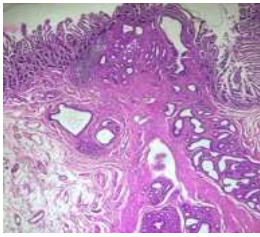
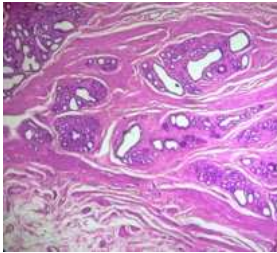


Figure -1**Figure -2****Figure -3**

Microscopic slide showing –fibro muscular (figure1) ,cystically dilated glands with muscle fiber and fibroblast infiltration. (figure2,3)

CONCLUSIONS

According to the WHO classification, adenomyoma is a benign lesion with no premalignant risk, defined as duct-like structures accompanied by hyperplasia of smooth muscle bundles. The real incidence of these lesions is difficult to settle as different names are used to designate the same histological lesion[4]. Adenomyomatous hyperplasia of the ampulla of Vater mimicking pancreatic head mass is an extremely rare tumor of the biliary tree. Unlike in other organs, this location has important clinical consequences, being misdiagnosed as an adenoma or carcinoma in most of the cases. With regard to clinical implication it has aggressive and morbid outcome. There is no accurate method to distinguish these lesions from an adenoma or carcinoma, and so, extensive surgery is frequently adopted.[5]

Surgical resection might be appropriate in patients with apparently localized disease or biliary obstruction. Local endoscopic resection (papillectomy) with sphincterotomy can be successfully carried out in distal intraductal adenomas. Radical resection should be recommended if a malignant tumor is suspected or the tumor exceeds 20 mm. PD should be selected for patients involving cancer of the distal common bile ducts. While local bile duct resection with Roux-en-Y reconstruction might also be curative for high-risk patients who are considered to have benign tumors.

Efforts must be done to improve the diagnostic tools. Cases with concomitant neoplasms are not negligible in the literature, with decision-making implications and increased surgical risk.

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