

Conventional barium study findings although characteristic but are not specific for SMAS. Non-invasive modalities like Colour Doppler ultrasonography, CT or magnetic resonance (MR) angiography are currently useful tools for diagnosis^{9,10}.

Upper GI study with barium contrast - can show dilatation of the first and second portions of the duodenum with a sudden cut off around the midline. Computed tomography (CT scan) of the abdomen is useful in the diagnosis of the SMA syndrome and can provide diagnostic information including the aorta-SMA distances and duodenal distension. It can also be used to assess intra-abdominal and retroperitoneal fat. Another diagnostic tool is fluoroscopy with contrast. Upper GI endoscopy (esophogastroduodenoscopy) may be necessary to exclude mechanical causes of duodenal obstruction. However, the diagnosis of SMA syndrome may be missed with this study. Finally, abdominal ultrasonography may be helpful in measuring the angle of the SMA and the aortomesenteric distance. The diagnosis of SMA syndrome is difficult. Confirmation usually requires radiographic studies, such as an upper GI scopy, hypotonic duodenography, and CT scan. Upper GI study with barium reveals characteristic dilatation of the first and second parts of the duodenum, with an abrupt vertical or linear cut off in the third part with normal mucosal folds. Fluoroscopy demonstrates a to-and-fro motion of the barium in the dilated proximal portion of the duodenum which is more seen in supine position than prone hence significant of SMA syndrome. Other findings include delay of 4-6 hours in gastro duodenal transit and relief. Abdominal ultrasonography may be helpful in measuring the angle of the SMA and the aortomesenteric distance but less sensitive than CT. Contrast-enhanced CT scan and magnetic resonance angiography (MRA) is useful in the diagnosis of SMA syndrome and can provide diagnostic information, including aorta-SMA distances and duodenal distension¹¹.

In acute or mild cases, conservative treatment should be attempted first, involving the reversal or removal of the precipitating factor with proper nutrition and replacement of fluid and electrolytes, either by surgically-inserted jejunal feeding tube, nasogastric intubation, or peripherally inserted central catheter administering total parenteral nutrition. Pro-motility agents such as metoclopramide may also be beneficial. Symptoms typically improve after restoration of weight, except when reversed peristalsis persists, or if regained fat refuses to accumulate within the mesenteric angle.

If conservative treatment fails, or if the case is severe or chronic, surgical intervention is required. The most common operation for SMA syndrome, *duodenojejunostomy*, was first proposed in 1907 by Bloodgood². Duodenojejunostomy, performed as either an open surgery or laparoscopically, involves the creation of an anastomosis between the duodenum and the jejunum, bypassing the compression caused by the abdominal aorta and the superior

mesenteric artery. Less common surgical treatments for SMA syndrome include Roux-en-Y duodenojejunostomy, gastrojejunostomy, anterior transposition of the third portion of the duodenum, intestinal derotation, and division of the ligament of Treitz. Lysis of the duodenal suspensory muscle has the advantage that it does not involve the creation of an intestinal anastomosis.

Duodenojejunostomy is the most frequently used procedure, and it is successful in about 90% of cases. The use of laparoscopic surgery that involves lysis of the ligament of Treitz and mobilization of the duodenum has been reported¹².

CONCLUSION

Superior mesenteric artery syndrome is a rare disorder and it can present as an acute upper gastrointestinal tract obstruction. As the condition presents in younger age group and more in females, it can be confused with some eating disorder which can be a cause of delay in diagnosis. It can be associated with high mortality if not diagnosed early. Delay in the diagnosis of SMA syndrome can result in fatal catabolism, dehydration, oliguria, electrolyte abnormalities, hypokalemia, acute gastric rupture or intestinal perforation, gastrectasia, spontaneous upper gastrointestinal bleeding, hypovolemic shock, aspiration pneumonia, or sudden cardiovascular collapse. CT scanning is useful in the diagnosis of superior mesenteric artery syndrome and can provide diagnostic information, including aorta-superior mesenteric artery distances and duodenal distension. Conservative management is the rule for acute cases. Surgery is indicated for failure of conservative management. Duodenojejunostomy is the procedure of choice and is effective in 90% of patients.

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Biliary Cystadenoma of Liver presenting as Hepatic Hydatid Cyst - A Case Report.

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Abstract: Biliary cystadenoma is a rare tumor which is difficult to diagnose before surgery. Here we present a case of 34 year old woman who presented with the impression of hydatid cyst of liver, which was completely resected. Histopathological examination revealed biliary cystadenoma of liver, Patient had uneventful post operative course and is on regular follow up with us.

INTRODUCTION

Biliary Cystadenoma arise in the liver in 85% of the cases, usually found in the parenchyma of the right lobe of the liver (intrahepatic and more rarely extrahepatic). It is rare lesion with less than 150 cases reported in literature. Cystadenomas comprise less than 5% of all intrahepatic cyst of biliary origin. They are more recurrent in middle aged females as compared to males with ratio of 4:1. They rarely communicate with biliary ductal system. The etiology of cystadenoma is not very clear. Due to the usual

absence of clinical symptoms, the most frequent diagnosis is by chance as in the excision of cystic lesion. In this paper, we report a case of biliary cystadenoma which was diagnosed after the excision of suspected hepatic hydatid cyst in an adult female.

CASE REPORT

A 34 year old lady was admitted with complaints of vague symptoms of heaviness in the right upper abdomen since two years. Physical examination was unremarkable. USG abdomen showed a cystic lesion with internal loculations in the segment of the liver. CECT abdomen showed a well demarcated rounded lesion in the segment 4 of the liver measuring 9.1 x 7.2 x 7 cm with enhancing walls and small peripheral fluid collections within it suggestive of daughter cysts (fig 1). Hydatid serology of patient was positive and other lab investigations were

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unremarkable. Patient was planned for pre-operative Albendazole therapy followed by Exploratory Laparotomy. During the operation, there was large cystic lesion approx. 9 x 8 cms involving the segment 4 of liver filled with mucinous contents (fig2). No other lesion in liver or any evidence of ascites were noted. Complete excision of cyst with peripheral rim of normal liver tissue done and specimen was sent for histopathological examination. Histopathological Examination shows variable sized cysts lined by low cuboidal to tall columnar epithelium suggestive of biliary Cystadenoma, liver. Post operatively, patient recovered well and was discharged on eighth post operative day. She is doing well during regular follow up.

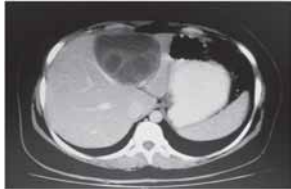


Fig.1



Fig.2

DISCUSSION

Biliary cystadenoma and cystadenocarcinoma are rare liver lesions¹. Biliary cystadenoma constitutes less than 5% of solitary non parasitic cysts of biliary origin. They are usually (85%) intrahepatic but extrahepatic locations have been reported. Fifty percent are located in the right lobe, 29% are founded in the left lobe and 16% are bilateral². Hepatobiliary cystadenoma with mesenchymal stroma occurs exclusively in young and middle-aged women and has potential to transform into cystadenocarcinoma. In contrast, Hepatobiliary cystadenoma without mesenchymal stroma occurs in both sexes equally, at a mean age of 50, and has no clear association with cystadenocarcinoma³. These tumors are lined with columnar epithelium and frequently have papillary infoldings. Biliary cystadenoma most often presents as an intrahepatic lesion. It may also manifest as an extension of the extrahepatic biliary tree in less than 10%⁴. The origin of these lesions is postulated to be proliferation of ectopic embryonic tissues that otherwise aid in development of adult gallbladder⁵. The gross and microscopic characteristics of biliary cystadenoma distinguish this entity from other hepatic based cystic lesions including simple cysts and malignant degeneration. Biliary cystadenomas appear as multilocular cystic lesions (rarely unilocular) that are surrounded by a smooth and thick fibrous capsule. The tumors contain numerous internal septations and intraluminal

papillary projections, which are lined by mucous-secreting cuboidal or columnar biliary epithelium. This epithelium is sometimes surrounded by a dense mesenchymal stroma containing smooth-muscle cells. Cystadenoma may display a wide range of symptoms, although it is mainly asymptomatic. The most typical symptoms are a slowly growing abdominal mass, upper abdomen pain, dyspepsia, anorexia, nausea and fever. These lesions can easily be confused with the other space occupying lesions of liver. They are usually diagnosed many years after onset of symptoms. Preoperative and intraoperative diagnosis is difficult. Laboratory results are normal in most the patients. Radiographically Cystadenomas have a septated, multilocular appearance on Ultrasound and CTscan. MRI shows typical features for a fluid-containing loculated mass with homogenous low signal intensity on T1-weighted images and homogenous high signal intensity on T2-weighted images. Variable intensities depend on the presence of solid components, hemorrhage, and protein content⁶.

Treatment must be surgical whenever possible, due to a potential malignant degeneration of these lesions. The malignant potential for cystadenoma support complete excision as appropriate treatment. In addition to the malignant potential of these lesions, there is a high likelihood of recurrence with operations other than complete excision.

CONCLUSION

In conclusion, preoperative excision of the diagnosis of cystic liver lesions is very important to determine the treatment of choice. Biliary cystadenoma should be suspected when radiologic imaging studies suggest a multilocular cystic hepatic lesion especially in a women. Because of recurrent risk and malignant potential, treatment of choice must be complete excision in these patient. Long-term good outcomes are expected with complete excision.

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Accessory Breast Tissue in the Axilla presenting as a Pendulous Mass: A Case Report.

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Abstract: We report a case of ectopic accessory breast presenting as a large pendulous mass in the left axilla. Surgical excision was advised but the patient did not agree.

INTRODUCTION

Polymastia means the accessory breast glandular tissue with or without nipple & areola in human beings. Accessory nipple with or without rudimentary glandular tissue is called polythelia. EBT is seen mostly along the milk line & may occur unilaterally & bilaterally & the most frequent sites are axilla, chest wall & vulva^{1,2}. Other unusual sites include knee, lateral thigh, buttock, face, ear & neck³. The incidence

is 2-6% in women⁴. Accessory breast tissue & polymastia are more common among Asians especially Japanese than Caucasians⁵. EBT has usually a nipple & areola & the duct system is separate from that of the normal breast but the response of EBT to physiological influences is the same as occurring in normal breast tissue. The variability of presentation & the possibility of other diseases make this problem clinically challenging & no established classification system exists to guide its management¹.

CASE REPORT

A 32 year old Indian female was admitted in the hospital with a large pendulous swelling in the left axilla (Fig 1) since 6 ½ years duration 2 weeks after

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