

when limited and localized within in the rectus abdominis muscle. Sonography followed by resonance, provides the most definitive imaging. Molecular markers are currently not established enough to be considered as a standard of diagnosis. Further large-scale studies or reviews are necessary to determine which approach is the best, with consideration of the patient's request.

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ABCDDV/1066

ABCD Arq Bras Cir Dig Letter to the Editor
2014;27(4):306

DOI: <http://dx.doi.org/10.1590/S0102-67202014000400020>

LOCAL EXCISION OF PAPILLARY ADENOMA IN PATIENTS WITH HIGH SURGICAL RISK FOR PANCREATODUODENECTOMY

Excisão local de adenoma de papila em paciente com risco cirúrgico elevado para duodenopancreatectomia

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Financial source: none
Conflicts of interest: none

Received for publication: 19/09/2013
Accepted for publication: 19/08/2014

INTRODUCTION

Benign tumors of the hepatoduodenal ampulla are rare, with few cases reported in the world literature. Among these tumors adenomas, lipomas, hemangiomas, carcinoid and leiomyomas have been described. The villous adenoma remains the most frequent^{2,5}. Necropsy studies have shown an incidence of around 0.04% to 0.12%, and for this rarely remembered in the periampullary lesions differential diagnosis².

The adenoma of it affects more frequently women, an age group between 5th and 7th decades, and is often associated with colonic polyposis. Initially, the patient may be asymptomatic and clinical findings begin to emerge with the growth of the tumor^{2,5}.

The most common symptoms are biliary colic pain type and gastrointestinal bleeding; in some cases there may be pancreatitis and obstructive jaundice⁵. The diagnosis is given by histopathological lesion obtained by upper endoscopy with duodenal papilla vision and always colonoscopy should be performed to identify adenomatous colonic polyposis.

Some authors^{2,3,5} believe in the existence of a pre-malignant lesions, where as malignant degeneration occurs in 30-40% of cases. Because of this potential for considerable degeneration, treatment is still controversial, with numerous discussions about the best approach, endoscopic, surgical with it transduodenal local excision or pancreaticoduodenectomy.

CASE REPORT

Woman of 77 years was admitted in General and Digestive Surgery Service, Walter Cantídio University Hospital, Fortaleza, CE, Brazil. Three months prior to admission, the patient began exhibiting abdominal pain in the epigastrium without irradiation and not associated with other symptoms. She denied weight loss, diarrhea, appetite loss or icterus. On examination she was in good general condition, normal colored and hydrated, focused and normal vital signs. Cardiac auscultation, pulmonary and abdominal examination without changes. Suffered from systemic hypertension, diabetes mellitus type 2 and dyslipidemia in regular medication use.

Laboratory investigation showed normal serum levels of transaminases and bilirubin. Endoscopy visualized polypoid lesion in the duodenal papilla, measuring about 5 cm, which was biopsied at seven different sites. Histopathology was compatible with tubulo-villous adenoma with low grade dysplasia. Abdominal ultrasonography showed normal common bile duct and gallbladder and bile ducts without dilatation. Computed tomography of the abdomen showed no changes. The colonoscopy was normal, not evidencing any other polypoid lesion.

The patient was taken to the operating room for the purpose of a transduodenal local resection of the tumor (ampulectomy), but with all the pre-operative support for a possible PD. During surgery, after duodenotomy, polypoid lesion of approximately 6 cm in the duodenal papilla (Figure 1) was observed.

The lesion was completely resected and the main pancreatic duct and common bile duct were fixed with synthetic absorbable suture. The tumor was sent for frozen biopsy, which resulted in tubulo-villous adenoma with high-grade dysplasia. Ampulectomy was done and was also performed catheterization with good visualization of the common bile duct and main pancreatic duct (Figure 2).

DISCUSSION

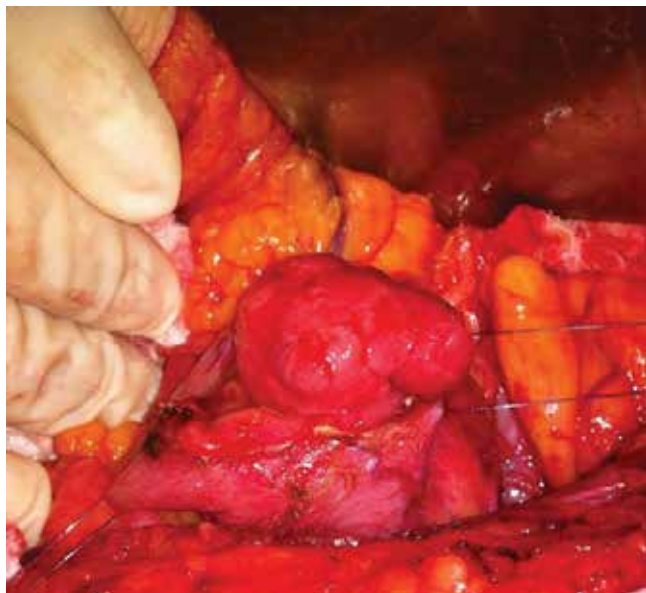


FIGURE 1 – Polypoid lesion of the papilla: laparoscopic transduodenal viewing

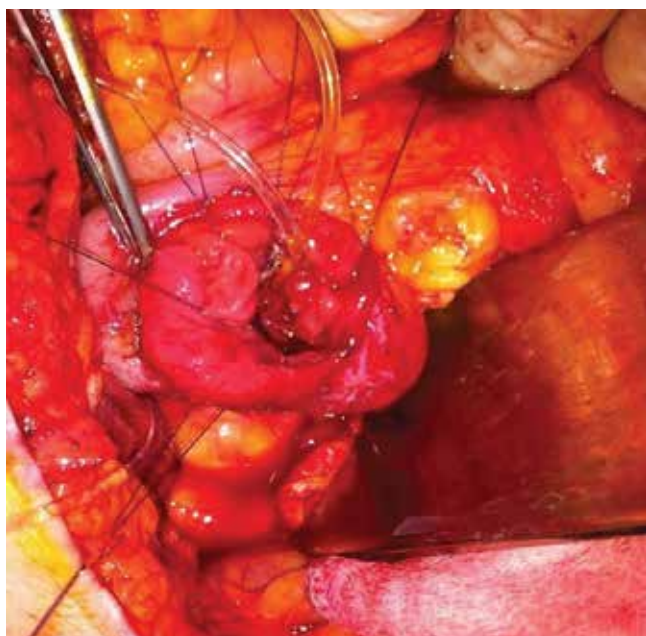


FIGURE 2 – Catheterization of the terminal common bile duct with output of bile and catheterization of main pancreatic duct with output of pancreatic secretion

With the resected lesion was necessary to reconstruct the gap left. The top wall of the pancreatic duct was sutured to the bottom wall of the bile duct with interrupted stitches in synthetic absorbable sutures, thus forming a common channel. The duodenum and the “new hepatopancreatic ampulla” were united with separated 4-0 absorbable synthetic stitches to create an anastomosis of the mucosal lining of the ducts with the duodenal wall. Afterwards, followed the duodenorrhaphy with separate 3-0 silk sutures.

Postoperatively, the patient stayed clinically stable, with physiological parameters and good diet acceptance. He was discharged on the 6th postoperative day.

Currently, the patient is asymptomatic and at six months follow-up. The final histopathology of the surgical specimen was tubulo-villous adenoma with high-grade dysplasia and free surgical margins. Postoperative endoscopy showed only papilla surgical scar without tumor recurrence.

Benign tumors of the duodenal papilla have a very low incidence around 0.04 to 0.12%. And so, hardly enter the differential diagnosis of jaundice by periampullary diseases. Most patients remained asymptomatic and develops symptoms of biliary colic, gastrointestinal bleeding, or jaundice in accordance with tumor growth^{2,3,5}.

The patient in this case complained of pain in the upper abdomen, but at no time presented jaundiced. The diagnosis was confirmed with histopathology obtained by endoscopy.

The treatment of benign tumors of the papilla is still controversial. There is no consensus in the literature about the best approach to these tumors, endoscopic, if surgical resection under local or pancreaticoduodenectomy^{1,3,5}. The proper approach to the patient should be thoroughly discussed, it is known that there is a likelihood of malignancy of these tumors of approximately 30-40%. In this case, patients undergoing endoscopic treatment or surgical treatment with local resection should be rigorously followed in the clinic so that recurrences are detected early^{2,3,5}.

The higher probability of malignant transformation of these tumors depends on a few factors: the larger the tumor, the greater the chance of harboring “islands” of adenocarcinoma; villous tumors are more associated with degeneration to carcinoma; multicentric tumors have a higher risk of malignancy and lesions located in the ampulla are more prone to malignancy than lesions located in the duodenum and small intestine². Some small adenomas (<1 cm) can be removed endoscopically with stenting of the biliar and pancreatic ducts to allow the resolution without stenosis. Options for endoscopic resection of these lesions include papillectomy or ampullectomy with snare and thermal ablation with laser, argon plasma coagulation and electrosurgery. Four criteria for eligibility endoscopic papillectomy are needed: the injury must have less than 4 cm and cannot be endoscopic malignancy appearance (must have regular margin, absence of ulceration and soft consistency); minimum of six biopsies confirmed the benign histology and absence ductal invasion by endoscopic ultrasound^{3,5}. However, endoscopic resection has a recurrence rate of 30% and often multiple attempts to be necessary before complete tumor eradication. Morbidity about 20% have been reported, including pancreatitis and duodenal perforation⁵.

Surgical options for ampullary tumors include transduodenal local excision or pancreaticoduodenectomy. In the case of villous adenomas, the risk of malignancy and the loss of opportunity to cure must be weighed against the complications of pancreaticoduodenectomy^{1,2,3,5}.

Thinking of the considerable risk of malignancy, one can agree that the best approach would be the pancreaticoduodenectomy, but one should be aware of the significant morbidity and mortality of this procedure¹. The mortality rate of pancreaticoduodenectomy in centers specializing in pancreatic surgery is in the range of 2-3%. Despite low mortality rates, the incidence of postoperative complications remains high. Yeo et al.⁴ showed a series of 650 consecutive pancreaticoduodenectomy in the John Hopkins Hospital. The mortality rate was 1.4%. The three most common complications were delayed gastric emptying in 19%, pancreatic fistula in 14% and surgical wound infection in 10%. These conditions also significantly increase the duration of hospitalization for the patient and hospital costs^{3,4,5}.

Even with so much discussion about the best surgical approach, it is known that most surgeons agree that patients should be brought to the operating room with pre-operative support for a wide resection for pancreaticoduodenectomy⁵. This patient preparation is essential if freezing demonstrate malignancy. If all these precautions are taken, it is known that local excision transduodenal can be an excellent treatment for benign tumors of the bulb, especially in patients with high surgical risk for PD^{12,5}. After resection of the local ampullary tumors should perform endoscopic control 6-12 months after surgery to assess local recurrence. Patients who have pancreatitis or jaundice months or years after local excision should undergo endoscopy with endoscopic retrograde cholangiopancreatography due to strong suspicion of relapse^{1,5}.

In this patient, it was decided to hold the local surgical resection with ampulectomy, because it showed the tumor >4 cm, histopathological (obtained for seven biopsies) was compatible with villous adenoma, freezing intraoperatively confirmed the nature benign lesion and clinically the patient had comorbidities and high surgical risk.

hepatic artery - or it can be said that the common hepatic artery arises as a branch of the superior mesenteric artery.

The objective of this paper is to present a case and emphasize the prevalence of anomalous positions of the hepatic arteries and their possible implications.

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CASE REPORT

It was observed in a male corpse, common hepatic artery originating from the superior mesenteric artery, located 3.5 cm lower and lateral from the celiac trunk, forming a hepatomesenteric trunk. The other branches of the celiac trunk were normal and exhibited the typical path (Figure 1).

ABCDDV/1067

ABCD Arq Bras Cir Dig
2014;27(4):308

Carta ao Editor

DOI: <http://dx.doi.org/10.1590/S0102-67202014000400021>

ATYPICAL ORIGIN OF THE COMMON HEPATIC ARTERY

Origem atípica da artéria hepática comum

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Received for publication: 29/08/2013
Accepted for publication: 21/08/2014

INTRODUCTION

Anatomical variations of the hepatic artery are commonly found during radiological examinations and abdominal operations^{1,89}. It is estimated that the variation index reach 45% of the population⁸. The significant prevalence gives this type of variation major medical importance, and justifies the surgeon know it to avoid iatrogenic injury.

The usual blood vessel anatomy is the common hepatic artery ascend from the celiac trunk⁸; however, this arrangement may change due to embryonic variations. These variations, from most to least frequent are: 1) the right hepatic artery ascend from the superior mesenteric artery; 2) the left hepatic artery ascend from the left gastric artery; 3) the two events occur simultaneously; and 4) the common hepatic artery ascend from the superior mesenteric artery.

In this article, is reported the occurrence of the fourth situation. According to the literature, there is no consensus on the criteria for designation of this variation. Therefore, it can be described in two ways: consider it a hepatomesenteric trunk - giving rise to the superior mesenteric artery and common

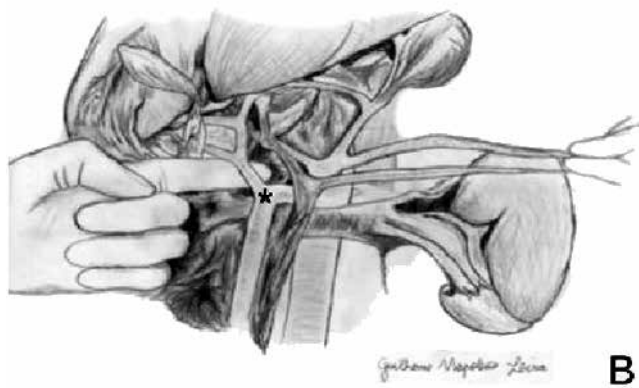
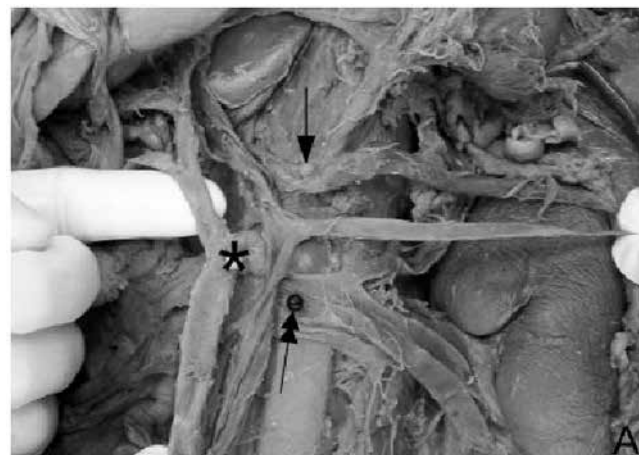


FIGURE 1 - A) Photograph of the abdominal cavity of the corpse with some vessels in evidence: the left renal vein (double arrow), celiac trunk (single arrow) and the hepatomesenteric trunk (indicated by *); B) illustration of the same photo, highlighting the hepatomesenteric trunk (indicated by *).

DISCUSSION

Variations of the hepatic artery have embryological basis¹⁰. During intrauterine development, there is the formation of four ventral splanchnic vessels, connected by a ventral longitudinal anastomosis. With the maturation of these, the two central roots degenerate. Thus, the first and fourth roots which form respectively the celiac artery and superior mesenteric artery anastomoses remain. If the separation between them occurs at different level of the standard pattern, any vessel in the celiac trunk can be shifted to the superior mesenteric artery. This situation appears in this case report: with the anomalous roots separation, there was formation of a hepatomesenteric trunk and other gastrosplenic.