Villous adenoma of papilla of Vater

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ABSTRACT: Biliary obstruction due to a benign villous adenoma of the ampulla of Vater treated by transduodenal local excision and sphincteroplasty is reported. Local surgical resection enabled a submucosal resection of the adenoma. *Can J Gastroenterol* 1990;4(6):235-236

Key Words: Ampulla of Vater, Benign tumour, Jaundice surgery

Adénome vilieux de la papille de Vater

RESUME: On rapporte un cas d'obstruction biliaire dû à un adénome vilieux de la papille de Vater et traitée par exérèse locale transduodénale et sphinctéroplastie. Une résection chirurgicale locale a permis la résection sous-muqueuse de l'adénome.

BENIGN TUMOURS OF THE AMPULLA of Vater are uncommon lesions; about 100 such cases have been reported in the English medical literature (1,2). With endoscopic retrograde cholangiopancreatography, a preoperative diagnosis and appropriate therapeutic planning is possible (3).

CASE PRESENTATION

A 55-year-old female diabetic on oral hypoglycemic drugs presented with episodic, colicky pain in the right

hypochondrium of three months duration. She had an episode of cholangitis – fever with chills and rigors, and jaundice six weeks prior to presentation. Physical examination revealed mild icterus, a smooth nontender liver 4 cm below the costal margin, and a palpable, tender gallbladder. Serum bilirubin was initially elevated at 3 mg/dL (51 μ mol/L). Serum alkaline phosphatase was 114 iu/L, and an ultrasound scan showed a distended gallbladder and a common bile duct dilated to its lower end. The

pancreatic head was normal. Endoscopy revealed a friable, polypoidal growth at the papilla and endoscopic punch biopsy revealed villous adenoma with moderate dysplasia.

Surgical exploration revealed a distended gallbladder and a dilated common bile duct. A firm nodular mass was palpable through the duodenal wall in its second part.

Duodenotomy revealed a firm, friable, bosselated polypoidal mass (1.5x 2.0x1.0 cm³) at the papilla. A submucosal excision of the mass and reconstruction of the common bile duct and pancreatic duct was performed. Frozen section was reported as villous adenoma without any evidence of malignancy. The patient had an uneventful postoperative period. Histopathology of the resected mass showed a villoadenomatous polyp. Multiple sections did not reveal any foci of overt malignancy.

DISCUSSION

Benign periampullary tumours are rare (less than 10% of all periampullary tumours) (1), and of all reported benign tumours, villous adenoma is the most common (4). More than 75% of the reported patients were symptomatic (1)

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Figure 1 Microphotograph showing villous adenoma with mild cellular atypia (Hematoxylin and eosin x196)

with nonspecific symptoms of abdominal discomfort (1,4,5), pain and weight loss (90%), jaundice (75%) (1,6), pancreatitis (7), upper gastrointestinal bleeding or duodenal obstruction (5,8). Hepatomegaly and a palpable gallbladder may be present (9). Laboratory investigation may reveal raised serum bilirubin and alkaline phosphatase, anemia and occult blood in the stool. Radiological investigation may reveal a dilated common bile duct (70%) or coexisting gallstones (13 to 20% of cases), and a barium study may

produce a 'soap bubble' appearance (1). Upper gastrointestinal endoscopic biopsy is helpful in the diagnosis (2,3).

On gross examination villous adenomas are fleshy, pink, nodular, pedunculated or sessile growths varying in size from 0.2 to 7 cm (4). Histological diagnosis is based on papillary and villous processes lined by tall columnar epithelium. Foci of malignancy have been noted in over 25% of patients who underwent surgical resection of the ampulla for benign adenoma (1,10). Multiple sections did not reveal any foci

of malignancy in the present patient. Patients with polyposis coli and Gardner's syndrome may have associated duodenal adenoma (11,12). These lesions should be resected, the method of resection varying from endoscopic to surgical (2,3). Once the frozen section examination has excluded malignancy, local submucosal excision with double sphincteroplasty of both the common bile duct and the pancreatic duct is the recommended procedure. If invasive carcinoma is suspected, pancreaticoduodenectomy is preferred (1,2).

A recurrence rate of 28% has been reported following segmental resection, local excision or endoscopic excision (13). Sobal *et al* (1) have reported that more than 85% of patients treated by local surgical excision were without evidence of recurrence for varying periods of follow-up. Endoscopic fulguration of recurrent ampullary adenomas after local surgical excision is safe and effective in combination with snare polypectomy (2).

Only one of the five cases reported by Shemesh *et al* (2) developed adenocarcinoma 40 months after surgery, while 22 of the patients in the series of Galandiuk *et al* (13) who did not return for follow-up at six to 12 month intervals developed recurrent tumours with malignant change and died of cancer. It is thus advocated that following local excision, the patients should be followed-up at six month intervals with endoscopy and biopsy (12,13).

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