Multifocal Papillary Intraductal Pancreatic Adenocarcinoma With A Mobile Cystic Lesion Of The Head of Pancreas

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Introduction

Cystic neoplasms of the pancreas are rare, accounting for approximately one percent of all pancreatic neoplasms and are typically confined to one area of the gland. Multicentricity in pancreatic cancer has been reported to be as high as 38 percent but it is uncommon to find a diffusely spread intraductal papillary adenocarcinoma in a clinically palpable mobile tumour. Described here are the clinical and pathological findings in a 70 year old male who underwent a total pancreatectomy for a cystic nodular lesion of the head with a diffusely spread intraductal adenocarcinoma of the body and tail.

Case Report

A 70 year old male presented with a six week history of diarrhoea and significant weight loss and a two week history of nocturnal epigastric pain. On examination he was cachectic and a mobile firm mass was palpable in the right upper quadrant, which measured approximately 7.5x7.5 cms. There were no other abnormal clinical findings. The patient was noted to have glycosuria and the blood glucose level was 11.4 mgs per litre. Blood tests including haemoglobin, white cell count, urea and electrolytes, liver function tests and erythrocyte sedimentation rate were normal. Ultrasound examination was not available at the time and barium studies and intravenous urography were normal.

At laparotomy the mass involved the head of the pancreas, was multicystic in appearance and yielded a thick gelatinous fluid when trucut-

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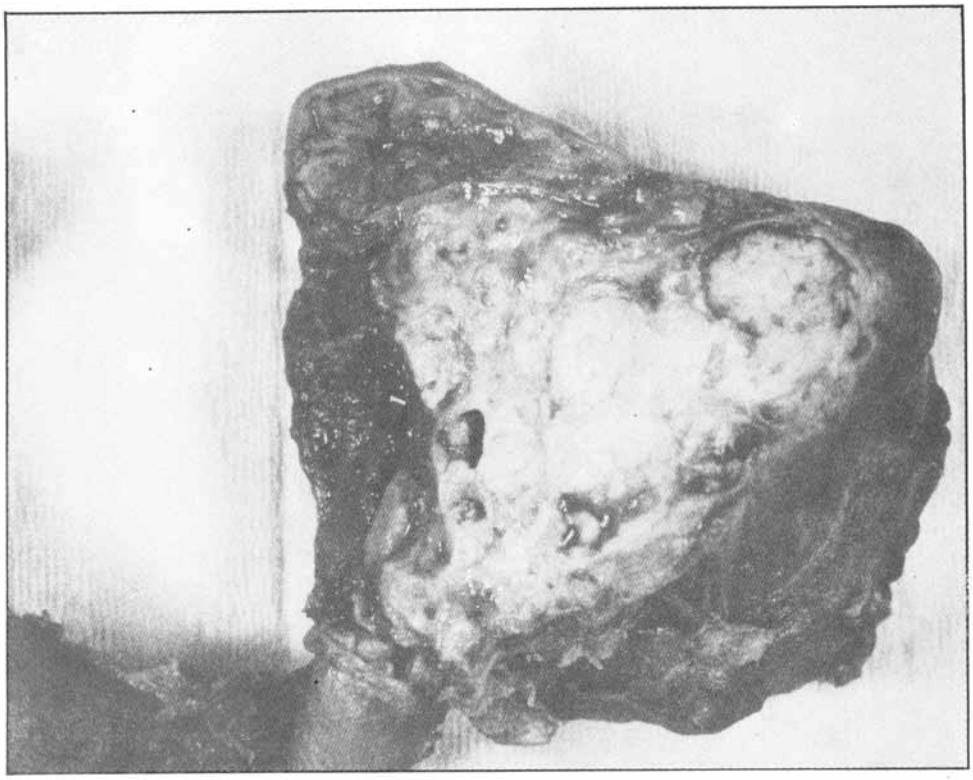

Figure 1a: Macroscopic section of the head of pancreas shows the large cystic and nodular tumour apparently contained within the pancreas.

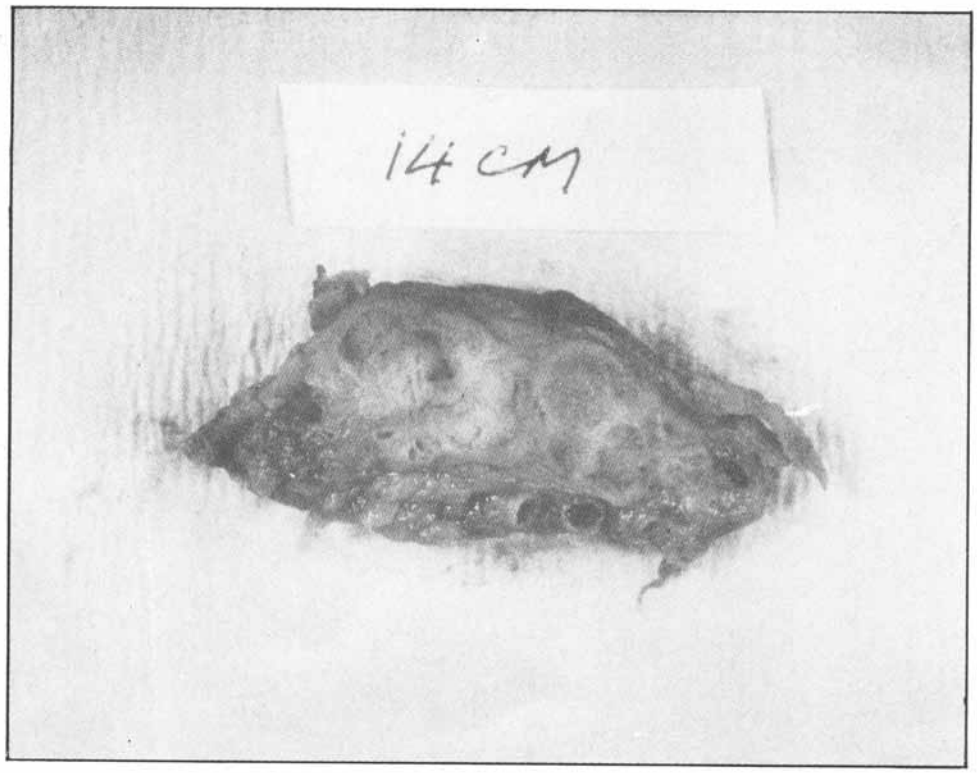

Figure 1b: A section 14 cms from the head of the pancreas shows one of the many nodules seen in the body and tail with histological appearances consistent with intraductal papillary adenocarcinoma of multifocal origin.

biopsy was performed. Frozen section analysis confirmed the presence of carcinoma. On further examination the lesion extended to the body and tail of the gland and biospsies confirmed that the tumour involved the entire gland. The liver was clinically free of tumour and there were no enlarged regional lymph nodes. Total pancreato-duodenectomy and splenectomy with cholecystojejunal and gastrojejunal bypass was performed. Histological examination of the pancreas showed the presence of a 6 cm gelatinous mass in the head of the pancreas which was partly papillary, partly mucinous moderately well differentiated adenocarcinoma. Multiple sections through the body and tail of the pancreas showed the presence of multifocal papillary intraductal well differentiated adenocarcinomas (Figs 1a and 1b).

None of the nodes in the resected specimen along with portions of duodenum, stomach and spleen were involved by the tumour.

Postoperative recovery was unremarkable apart from stabilization of resultant diabetes. He is currently well nine months following surgery.

Discussion

Cystic neoplasms of the pancreas are rare and they differ from solid neoplasms in that they typically occur in a comparatively younger age group, the middle to late middle aged,[1] are confined to one area of the gland[2] and are associated with a good prognosis.[3] Ductal adenocarcinoma on the other hand is typically located in the head of the pancreas with an average diameter of 5 cms. It is confined to the pancreas in a minority of cases and has a peak incidence in the seventh decade. The incidence of multicentricity with such tumours has been reported to be as high as 38 percent[4] in several recent surgical and autopsy series but the clinical significance of this finding remains uncertain.

A CT scan is considered the most useful preoperative investigation in confirming the diagnosis while barium contrast studies and intravenous urography, although not useful in this particular case, may show distortion of the local anatomy due to extrinsic compression by the tumour.[5]

The prognosis for this patient is unclear due to several factors; the tumour was partly mucinous, partly papillary cystic adenocarcinoma of the head while having a diffusely spread intraductal papillary adenocarcinoma of the body and tail. The lesion was freely mobile. It was easily removed and

did not appear to have spread beyond the gland. Also ductal adenocarcinomas have a poor prognosis while cystic papillary epithelial tumours are associated with a 60-70 percent 5 year survival.

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