

Serous Cystadenocarcinoma of Pancreas

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ABSTRACT

Serous cystic neoplasms of pancreas are relatively rare tumours. Malignancy in these tumours is even more rare which is confirmed by metastasis to other organs or by perineural, vascular or surrounding soft tissue invasion. A 60 years old lady presented with vague upper abdominal pain. Computed tomography scan showed multiloculated cystic mass in the body of pancreas measuring 9 x 6 x 5 cm and not involving spleen. Pancreatectomy specimen showed a multicystic tumour having sponge-like appearance which showed vascular and soft tissue invasion of surrounding stroma on microscopic examination and was diagnosed as serous cystadenocarcinoma of pancreas.

Key words: *Pancreas. Cystadenocarcinoma. Pancreatic cyst.*

INTRODUCTION

Cystic neoplasms of pancreas are relatively rare tumours that can be divided into serous and mucinous category.¹ Mucinous neoplasms carry a significant malignant potential whereas serous tumours are mostly benign.² Malignancy in serous cystic tumours is a very rare phenomenon and is confirmed by metastasis to other organs such as liver, spleen, lymph nodes and stomach or by perineural, vascular or surrounding soft tissue invasion.³⁻⁵

Around 25 cases of serous cystadenocarcinomas have been diagnosed and published to-date.⁴ No such case has been reported from Pakistan. We report a case of serous cystadenocarcinoma of body of pancreas in 60 years old lady having vascular and local soft tissue invasion.

CASE REPORT

A 60 years old lady presented with vague upper abdominal pain for few months. Laboratory investigations were unremarkable. The pain persisted after symptomatic treatment and computed tomography scan of abdomen showed a multiloculated cystic mass measuring 9 x 6 x 5 cm arising from the body of pancreas. Spleen was not involved by the mass. On further radiological survey, no lesion was found in other organs such as liver, stomach, kidney and lymph nodes.

After surgical consultation, laparotomy was planned and patient underwent partial pancreatectomy and splenec-

tomy with preservation of head of pancreas. The specimen was received in the Department of Pathology of Combined Military Hospital (CMH), Quetta, weighing 730 grams. It consisted of body and tail measuring 9 x 9 x 4.5 cm and spleen measured 9 x 5.5 x 5 cm. There was a tumour arising from body of pancreas measuring 9 x 6 x 4.5 cm almost completely replacing the normal pancreatic tissue and sparing small portion of tail of pancreas. Tumour had a glistening lobulated external surface. Cut surface of the tumour had spongy appearance and showed numerous small cysts with few solid areas (Figure 1). Tail of the pancreas was unremarkable and spleen was not involved grossly.

Microscopically, the tumour composed of small uniform and larger variably sized cysts lined by cuboidal cells having bland looking nuclei and clear cytoplasm (Figure 2). There were few small clusters of atypical cells invading surrounding soft tissue stroma and lumina of small vessels (Figure 3). The tumour was diagnosed as a serous cystadenocarcinomas. The patient unfortunately died on the third postoperative day due to thromboembolism.

DISCUSSION

Serous cystic neoplasms of exocrine pancreas are epithelial tumours composed of cysts lined by glycogen rich cuboidal cells.³ Although rare, majority of tumours in this category are benign as compared to mucinous cystic tumours which tend to be malignant. Benign serous cystic tumours comprise 1 – 2% of all tumours of exocrine pancreas while only 25 cases have been diagnosed as malignant serous tumours.⁵

These tumours can present with vague abdominal pain, nausea, vomiting, weight loss and palpable mass on clinical examination or as an incidental finding on radiological examination.^{6,7} Bleeding from esophageal varices may result from metastasis to stomach. Jaundice due to obstruction of common bile duct is rare. On histological examination, serous cystadenocarci-

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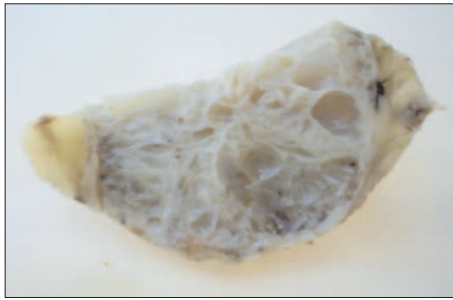


Figure 1: Gross appearance of tumour having sponge-like appearance.

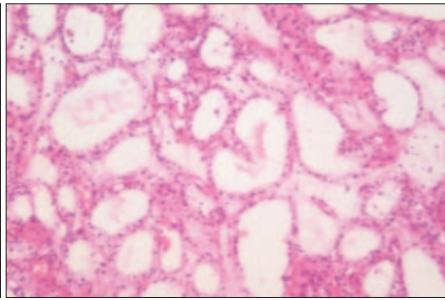


Figure 2: Small cysts lined by cuboidal cells having clear cytoplasm.

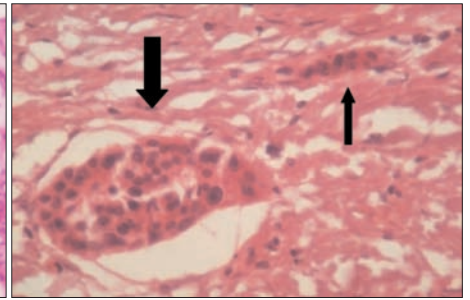


Figure 3: High power magnification showing two clusters of atypical cells showing vascular (large arrow) and soft tissue (small arrow) invasion.

nomas are indistinguishable from benign serous tumours, however, in some cases there may be some atypia of the cells.⁸ Malignancy in these tumours is, therefore, established by either local invasion or metastasis to other organs or sites detected radiologically which may be then confirmed by histopathological examination.

Cases of serous cystadenocarcinomas that have been reported in literature have either shown local invasion into surrounding structures such as mesentery and duodenum or metastasis to other organs such as liver, spleen, regional lymph nodes and stomach.^{3-5,7,8} In this case, no metastatic lesion were found in the surrounding organs and malignancy was confirmed on histological examination by demonstrating local invasion into surrounding soft tissue and vascular invasion.

A multidisciplinary approach involving clinician and pathologist is required for diagnosis. The clinician must always keep in mind the potential of serous tumours being malignant while deciding patient management and thorough sampling by the pathologist along with correlation with radiological findings can help diagnose this rare tumour.

Signs of malignancy in otherwise benign serous pancreatic tumour include increase in size, weight loss and symptoms related to metastasis such as bleeding from esophageal varices. Therefore, regular follow-up is advised in such patients after excision. Studies have shown that despite being diagnosed as adenocarcinomas, these tumours have a very good prognosis with long-term survival after complete resection even when there is metastasis to other organs.^{4,9}

Serous cystadenocarcinoma of pancreas is a very rare tumour which is histologically indistinguishable from

its benign counterpart, therefore, requiring absolute clinical appraisal, thorough specimen sampling and proper radiological survey to establish local invasion or metastasis.

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