

PERIAMPULLARY ADENOCARCINOMA OF THE DUODENUM MIMICKING NEUROENDOCRINE TUMOUR

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ABSTRACT

Adenocarcinoma of the small bowel is 40-60 times less common than its counterpart in the large bowel ^[1]. Periapillary neoplasms include carcinomas of the duodenum, ampulla of Vater, distal common bile duct, and pancreas. Adenocarcinomas are the uncommon of small bowel malignancies, followed by carcinoid tumours, lymphomas, and leiomyosarcomas.

KEYWORDS: Adenocarcinoma, Duodenum, Periapillary carcinoma.

INTRODUCTION

Small intestine constitutes 70% of the bowel and tumors arising from it are rare accounting for 0.3% to 1% of gastro-intestinal malignancies.^[2] Most of these small bowel adenocarcinomas are located in the duodenum^[3] but least common of the periampillary tumours^[4] Periapillary carcinoma include carcinomas arising from ampulla of Vater, distal common bile duct (CBD), pancreas, and duodenum.^[5,6] Most patients are elderly and there is no sex predilection. The usual presentation of ampillary tumors is biliary obstruction: obstructive jaundice, right upper quadrant pain, and weight loss.

CASE REPORT

A 63 years old male complaints of pain in the right hypochondrium, colicky type for 10 days and yellowish discoloration of urine for 2 days. History of passing pale coloured loose stools, nausea, loss of appetite and loss of weight.

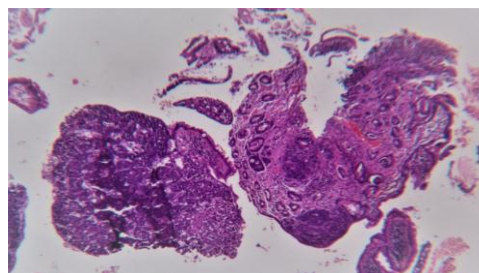
Ultrasonography showed dilated CBD and intrahepatic biliary radicles, Gall bladder sludge.

Elevated LFT levels, presence of bile salts and bile pigments in urine. CECT report -Enhancing lesion of size 5*2.8 cm involving the medial aspect of first and second part of duodenum

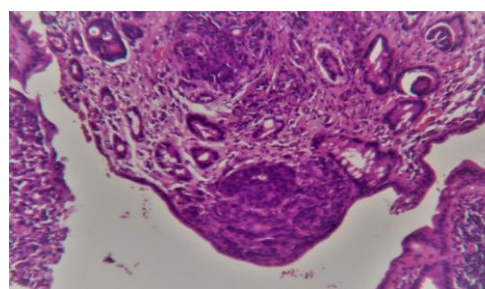
UGI Scopy-Circumferential ulceroproliferative growth noted at D1 D2 junction. Biopsy taken.

Gross-Received multiple grey white soft tissue bits measuring < 0.5 CC.

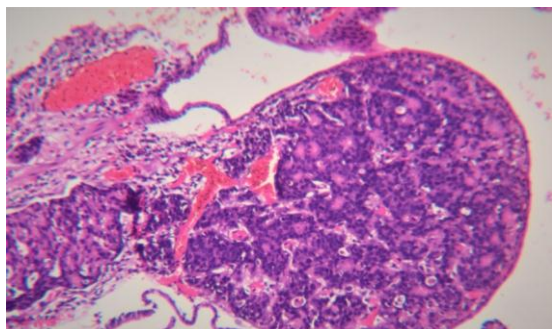
Microscopy-Sections shows fragments of neoplasm composed of round to oval cells with vesicular nuclei arranged in nests, islands and also in trabeculae and microacinar pattern.



Scanner view



Low power view showing nests and islands of neoplastic cells.



High power view showing cells arranged in microacinar and trabecular pattern.

DISCUSSION

Adenocarcinoma of the small bowel is 40-60 times less common than its counterpart in the large bowel. Approximately 40-50 % occurs in the duodenum. Most cases of duodenal carcinoma arise in the mucosa in the region of the Ampulla. Neuroendocrine carcinoma is a rare type of small bowel malignancy composed of small, round to oval cells with scanty cytoplasm and hyperchromatic nucleus. Small cell carcinoma can present in a pure form or mixed with ordinary adenocarcinoma. Adenocarcinoma of the duodenum is the least common of the periampullary tumours.^[8] The ampulla of Vater is a complex region where the CBD and the main pancreatic duct converge to enter the second portion of the duodenum in the vicinity of the pancreas. The usual presentation of ampullary tumors is biliary obstruction: obstructive jaundice, right upper quadrant pain, and weight loss. Distant metastatic disease most frequently involves the liver, lymph nodes, peritoneum, lungs, bone, kidney, and, rarely the skin. In our case biopsy was done. Immunohistochemistry for Neuroendocrine tumour with Chromogranin was negative. Adenocarcinoma ampulla can have a neuroendocrine differentiation.

CONCLUSION

In small biopsy Neuroendocrine picture must be confirmed with IHC and final diagnosis will depend on extensive sampling.

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