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CASE REPORT

CHROMOPHOBE RENAL CELL CARCINOMA MASQUERADING AS OBSTRUCTIVE JAUNDICE AND GASTRIC OUTLET OBSTRUCTION

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ABSTRACT: BACKGROUND: Chromophobe (Chr RCC) is a distinctive entity of Renal Cell Carcinoma (RCC) arising from cortical portion of collecting duct of kidneys with an incidence of 3-5% (1). Localized Cromophobe RCC suggests a better prognosis than other type of RCC but there is a poorer outcome with sarcomatoid features or metastatic disease (1). Renal cell carcinoma is one of the few tumors known to metastasize to the pancreas (2). Metastatic pancreatic cancer is rare, accounting for approximately 2% of all pancreatic malignancies, and most cases arise from renal cell carcinoma (3). Of patients with pancreatic metastases, 12% present with synchronous extra pancreatic metastasis, and they have a poor prognosis. Chromophobe RCC presenting as obstructive jaundice and gastric outlet obstruction has been cited infrequently in literature (3). The purpose of this paper is two: first, a rare case ChRCC with atypical presentation with obstructive jaundice, gastric outlet obstruction and pancreatic metastasis. Second, multidisciplinary treatment involving General surgeon, Medical Gastroenterologist, Surgical Gastroenterologist, Urologist, Interventional Radiologist and a Medical oncologist. **CASE PRESENTATION:** A 43 years old female presenting with features of obstructive jaundice and gastric outlet obstruction in surgical outpatient. A multidisciplinary management approach found Metastatic ChRCC the cause for gastrointestinal manifestation**. CONCLUSIONS:** ChRCC can be local invasion or metastatic. There are multiple sites where metastases can occur. There are many specific investigations to confirm RCC and concomitant gastric outlet obstruction (GOO), obstructive jaundice and pancreatic secondaries. This patient was diagnosed early after presentation of acute symptoms, decompression of biliary system done early by PTBD, Radical nephrectomy done with Portahepatis node which was causing obstructive jaundice and gastric outlet obstruction. Frozen section biopsy from pancreas and liver secondaries were positive for ChRCC. After surgery patient recovered without any immediate or late post-operative complications. Started on chemotherapy and doing well after 6 months follow up.

KEYWORDS: Chromophobe RCC, PTBD, Pancreatic secondaries, obstructive jaundice.

CASE PRESENTATION: A 43 year old female was received in the surgery OP with the complaints of right side abdominal pain, distension, jaundice, vomiting and pruritus for three month. All symptoms are acute in onset and progressive in nature. Nausea and vomiting are severe since 2 days. She had not passed stools since 2 days and flatus since the previous evening. Physical Examination icterus, dehydration. Abdomen examination revealed mild abdominal distension with tender mass in right hypochondrium and as per rectal examination showed collapsed rectum.

Pulse rate – 84/ min B.P – 110/70 mm hg, Temperature 101 F.

The first plain abdominal X-ray revealed only normal intestinal gas. A Ryle's tube was inserted which drained around 250 ml of bilious fluid.

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Blood reports showed S. Bilirubin-23 Liver enzymes- raised S. Amylase and CA19-9 was normal.

Contrast CT Abdomen: Revealed Right renal intra paranchymal mass 5.9 x 5 cms; Ill-defined mass in head of the pancreas 4.1 cms. Dilated Intra hepatic biliary radicals with Porta hepatis node.

CECT Chest: No significant abnormality detected.

Conservative Management**:** Patient was managed conservatively for 2 hours with IV fluids and parental antibiotics. Upper GI endoscope showed extraneous compression on D2. Medical Gastroenterologist opinion obtained and ERCP done on second day once the patient become stable.
ERCP: On second and third day ERCP was attempted twice but failed as CBD could not be cannulated. Hence radiologist expertise was sought and Per Cutaneous Transhepatic Biliary Drainage (PTBD) was done to decompress the biliary system. Her serum bilirubin was reduced to 3mg on seventh day.

Tissue Biopsy: Meanwhile an Ultrasound guided biopsy of right renal mass and head of the pancreas was done. The histopathology was reported as Eosinophilic variant of chromophobe Renal Cell Carcinoma (RCC); pancreatic cytology malignant lesion cannot be ruled out.

Urologist and Surgical gastroenterologist opinion are obtained, and once the patient is fit it was decided to do an Exploratory Laparotomy.

Operative Procedure: Exploratory Laparotomy with Right Radical Nephrectomy, excision of periportal lymph nodes with biopsies from head of the pancreas was done. Under ETGA, patient in right lateral position, parts painted and draped. Right subcostal incision made. Incision deepened, peritoneum opened and abdomen entered. Right colon mobilized; right renal artery and ureter identified and ligated. Right radical nephrectomy done.

Surgical Gastroenterologist opinion obtained for pancreatic mass. There was conjugate nodal mass at level of gastro duodenal ligament involving CBD, common hepatic artery, celiac artery, duodenum and posterior wall of stomach. There were multiple lesions in the left lobe of the liver. Both the pancreatic head mass and liver secondaries were sending for frozen section and reported as malignant. Hemostasis obtained and wound sutured in layers.. She is currently on sorafenib.

Histopathology: Chromophobe (Eosinophilic) variant of RCC. Gastro duodenal node and pancreatic biopsy features in favour of metastatic carcinoma of RCC.

RESULTS: The patient did well postoperatively and there were no untoward instances in the immediate or late post-operative period. The patient was discharged on the 11th Post-operative day after suture removal.

DISCUSSION AND LITERATURE REVIEW: Renal cell carcinoma is one of the few tumors known to metastasize to the pancreas.[1] Metastatic pancreatic cancer is rare, accounting for approximately 2% of all pancreatic malignancies, and most cases arise from renal cell carcinoma.[2] RCC is known for its multiple terms of presentation and its propensity to metastasize by way of both venous and

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lymphatic routes.[3] Renal cell carcinoma (RCC), melanoma, lung cancer, colorectal cancer and breast cancer are known to metastasize to the pancreas.[4] Chromophobe RCC is a distinctive entity of RCC arising from cortical portion of collecting duct with an incidence of 3-5%. Localized Cromophobe RCC suggests a better prognosis than than other type of RCC but there is a poorer outcome with sarcomatoid features or metastatic disease.

Of patients with pancreatic metastases, 12% present with synchronous extra pancreatic metastasis, and they have a poor prognosis. Ampullary metastases from RCC are quite rare. Sporadic reports of isolated metastases in the ampulla of Vater involved lesions which presented with obstructive jaundice.[5] A quarter of patients with RCC present with advanced disease, including locally invasive or metastatic cancers. Moreover, a third of patients undergoing resection will have recurrence.[6] Gastric metastases from disseminated RCC have been reported only infrequently.[7] among these metastatic sites, metastasis to the stomach is quite rare, even in autopsy studies.[8]

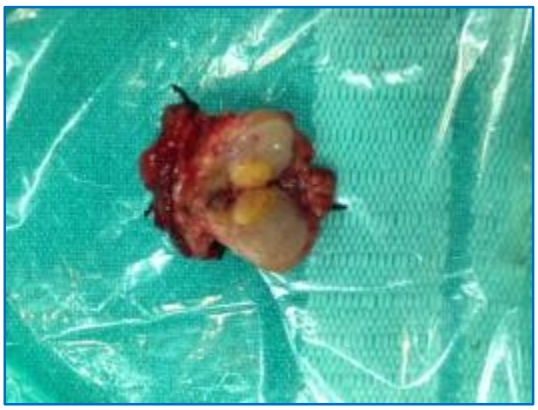

Fig. 1

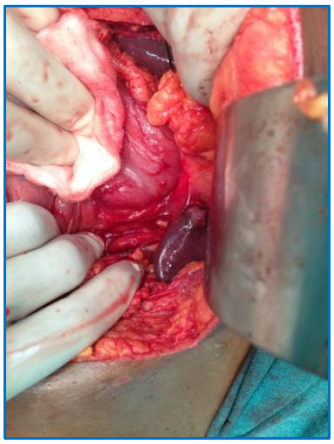

Fig. 2

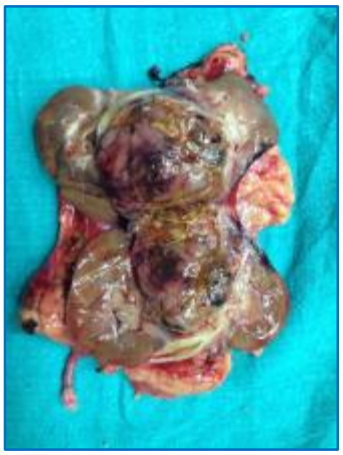

Fig. 3

Fig. 4

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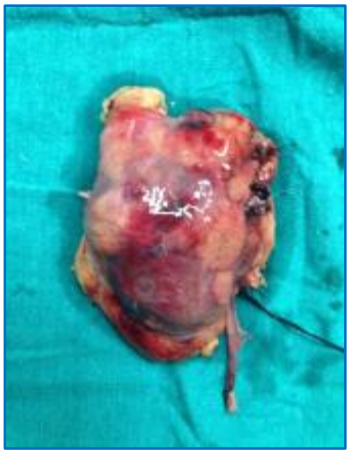

Fig. 5

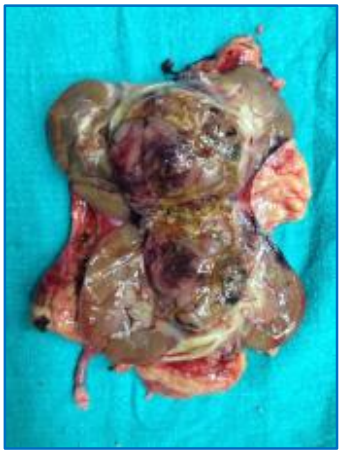

Fig. 6

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