CASE REPORT

SOLITARY JEJUNAL METASTASIS FROM RENAL CELL CARCINOMA

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A metastatic deposit from renal cell carcinoma into the jejunal wall is a rare phenomenon. Among the frequent modes of presentation, bleeding, obstruction and unexplained anaemia are commonly seen. In addition to the conventional contrast studies and computerized tomography (CT), Capsule endoscopy is a useful diagnostic tool. Factors responsible for resistant behaviour of jejunal wall are still not clear, however when it happens it is really a diagnostic challenge. We are reporting this rare case of solitary jejunal metastasis from renal cell carcinoma.

Keyword: Jejunum; Metastasis ; Renal; Carcinoma

CASE REPORT

A 65 years old lady presented with tiredness, weight loss, and intermittent abdominal pain. Abdominal examination was unremarkable.

During routine work up, she was found to be having low haemoglobin; 8g/dl, and raised erythrocyte sedimentation rate (ESR) of 120mm/01 Hour. CT scan showed high small bowl obstruction with thickened small bowl loops in the territory of jejunum (Fig 1&2). Small bowl series also confirmed the same. Capsule endoscopy revealed ulcerating lesion in the area of jejunum.

This patient was admitted a year ago in the surgical ward with low haemoglobin and CT scan showed a mass on the upper pole of right kidney as well as enlarged adjacent adrenal gland. No evidence of metastasis was detected in all other investigations. Subsequently patient had right radical nephrectomy and adrenalectomy. Histopathology revealed T2G4 renal cell carcinoma and pheochromocytoma.

After discussion and consent, patient underwent laparotomy and was found to be having large solitary mass in the region of jejunum causing obstruction. Small bowl resection and end-to-end anastomosis was carried out. Patient made uneventful recovery from the surgery.

Histopathology reported the lesion to be a metastatic renal cell carcinoma.

DISCUSSION

Small bowl metastasis is extremely rare phenomenon representing only 10% of malignant small bowl tumours. Literature has shown that only 7% of renal cell carcinomas metastasize to distant organs. Data on renal cell cancer metastasizing to small bow is very limited, especially metastasis to jejunum is very rare to find.

Review of literature has revealed that it is first ever reported case of jejunal metastasis in Northern Ireland, third ever reported case in UK and seventh of its kind in the world reporting solitary jejunal metastasis from renal cell carcinoma.

Common cancers metastasizing to the small bowel are from the lung, head & neck, breast, oesophagus and malignant melanomas[1-5]. During eleven year period in which there were 6006 hospital admissions for lung cancer, McNeill et al[1] had six

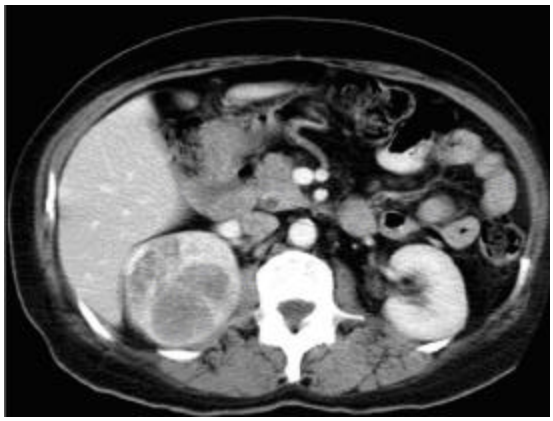

Figure 1. CT scan picture of renal cell carcinoma

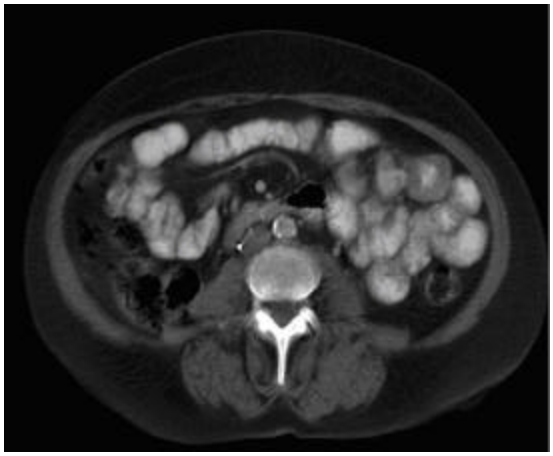

Figure 2. CT scan picture of thickened jejunal wall

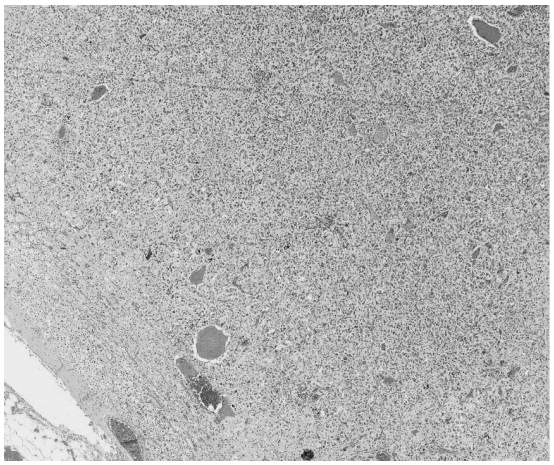

Figure 3. Histological appearance of renal cell carcinoma

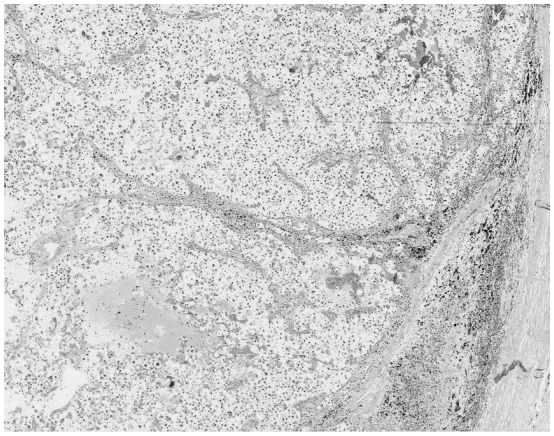

Figure 4. Histological appearance of renal cell carcinoma and pheochromocytoma

patients with clinically apparent bowel metastases. Most of the cases presented with perforation. They concluded that this unusual problem may occur with greater frequency as patients with lung cancer survive for longer periods of time[1].Guillem et al[2] studied ten cases of cancers of head and neck which metastasized to small bowl. Obstruction was common mode of presentation in their study. Ogiso S et al[3] reviewed twenty cases of small bowl metastasis from renal cell cancer recently. We are reporting twenty first case of this rare presentation.

Small bowl metastasis has been regarded as one of bad prognostic factors in a number of studies[4]. Metastasis to the small bowel usually presents with obstruction and rarely with haemorrhage, anaemia or perforation[5].

The mode of presentation in our patient was in the form of obstruction.

One of the important diagnostic challenges in histopathological evaluation of such metastasis that we had faced is its similarity to the pheochromocytoma (Fig 3-5).

CONCLUSION

Regular small bowl screening is essential in the follow up of patient with renal cell carcinoma. Unexplained anaemia in a patient with renal cell carcinoma may be due to jejunal metastasis. High degree of suspicion is an important factor. Capsule endoscopy is a useful diagnostic tool in evaluating suspicious small bowl pathology.

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