

A RARE CASE OF CARCINOID TUMOUR PRESENTING AS AN ACUTE INTESTINAL OBSTRUCTION WITH CRYPTORCHIDISM

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ABSTRACT:

A 40 year old man known to have cryptorchidism, presented with acute intestinal obstruction. At laparotomy stricture of the distal ileum, distended small intestine with enlarged multiple mesenteric and pelvic nodes were found. Right hemicolectomy was done and biopsies of mesenteric and pelvic lymph nodes proved the tumour to be malignant carcinoid tumour with metastasis to lymph nodes. Biopsy of the atrophied right testis showed presence of seminal vesicles.

KEY WORDS: carcinoid tumour, obstruction, small intestine, cryptorchidism

INTRODUCTION:

Carcinoid tumours are the most common gastrointestinal endocrinal tumours. They constitute 55% of all the gut endocrinal tumours and 13–34% of all tumours of the small intestine. The incidence is 1.5 per 100,000, of the general population^{1,2}. Carcinoid tumours may originate from neuro-endocrine cells all along the^{1,2} gastrointestinal tract³. About 85% of these are located in the intestine. They also occur in the lungs⁴, thymus⁵, pancreas, biliary tract, kidneys⁶, ovaries of testis⁷.

The most common location of carcinoid tumours in the gastrointestinal tract is the appendix. Appendiceal carcinoids rarely metastasize. Ileal carcinoids³ have the highest propensity to metastasis.

Though the peak incidence^{1,2} is between the 6th – 7th decades, carcinoid tumours can occur from the age of 10 years to 90 years. Gastric carcinoids are frequently silent. If symptomatic, they cause

upper abdominal pain or bleeding. Carcinoid tumours are often silent and are found incidentally at laparotomy. Appendicular carcinoids may present as an acute obstructive appendicitis.

Carcinoid tumours are slow growing and may be present for years without symptoms. One-third of these patients have chronic intermittent abdominal pain. Malignant carcinoid tumours³ generally induce advanced fibrosis which by kinking of the intestine and fibrous adhesions may cause mechanical obstruction even when the primary tumour is small.

Other symptoms include diarrhoea, upper GI bleeding, weight loss, intussusception, and a palpable abdominal mass. The most frequent site for hind-gut carcinoid is the rectum. These tumours present with bleeding per rectum. If tumour metastasizes to the liver, clinical features of carcinoid syndrome will be present.

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HISTORY:

A 40 years old male presented with complaints of dull aching pain in the right lower abdomen for four years and loss of weight and appetite for six months. He gave a history of central abdominal pain, generalised abdominal distention, vomiting and constipation for the past four days. There was no history of haematemesis or malaena.

He is married for the past fifteen years, but has no children. He is a non-smoker and does not drink alcohol. He does not have diabetes, hypertension of ischaemic heart disease.

On examination the patient was moderately built and adequately nourished. He weighed 60 Kg and was haemodynamically stable. General examination was normal. Secondary sexual characteristics were well developed. There was generalised distention of the abdomen but no guarding or rigidity. On auscultation bowel sounds were exaggerated. On examination of the genitalia, the patient had cryptorchidism. Rectal examination revealed metastatic nodes in the recto-vesical pouch. Other systems were normal.

INVESTIGATIONS:

The Hb. was 11 gm %, Random blood sugar 120 mg %, creatinine 0.7 mg %, sodium 143 meq/L and potassium was 4.5 meq/L. Chest X-ray and ECG were normal. Plain X-ray abdomen in the erect position showed multiple air-fluid levels while the supine film showed dilated loops of intestine with valvulae conniventes. Ultrasound abdomen showed no metastatic lesions in the liver.

Picture 1

***Plain X-Ray Abdomen
-Erect Position: Showing
Multiple Air-Fluid Levels.***

TREATMENT:

The patient was prepared for surgery. At laparotomy distended loops of jejunum and ileum with annular stricture at the terminal ileum were found. Right hemicolectomy along with biopsies of mesenteric and pelvic lymph nodes were done. Atrophied right testis present near the

deep inguinal ring was biopsied. The post-operative period was normal.

BIOPSY REPORT:

(Biopsy No. 885/98-Manipal College of Medical Sciences, Pokhara, Nepal)

1. Carcinoid tumour of distal ileum with metastases to mesenteric and pelvic nodes.
2. Right undescended testis in a patient with cryptorchidism.

GROSS FINDINGS:

Specimen consists of part of small intestine, caecum, appendix, and part of large intestine measuring 34 cm in length. Cut surface shows an area of stricture. 18 cm from the proximal resected end (small bowel end) Cut surface through the area

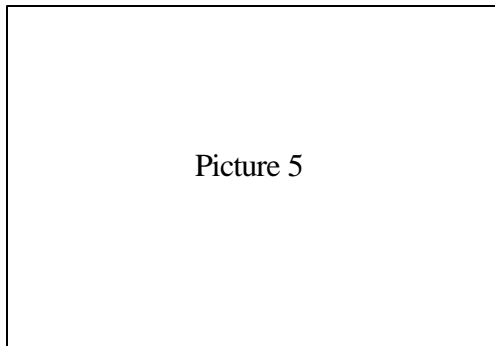
Picture 2

***Plain X-Ray Abdomen
-Supine Position: Showing
Dilated Loops of Intestine with
valvulae Conniventes (Jejunum).***

Picture 4

***Cut Section of the Specimen Showing the Tumour –
White Homogenous Areas, Narrowing the Lumen.***

shows narrowing of the lumen, areas of ulceration and a solid white area (the tumour), involving the entire thickness of the wall up to the serosa. Ulcer is excavated and measures 3x3 cms.

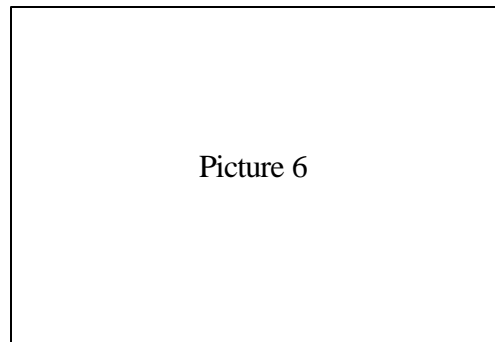


Cut Section of the Specimen which has been stretched out. Tumour Area shows Narrowing of the

Four lymph nodes are isolated in the mesentery. Cut surface of three lymph nodes show gray white areas. Another lymph node from the pelvis shows yellowish to brownish areas. Another bit of tissue measuring 0.5x0.5 cm which has a homogenous cut surface.

MICROSCOPIC FINDINGS:

Sections show a tumour composed of tumour cells forming nests and ribbon pattern separated by thin fibrovascular connective tissue. Cells of the tumour show distinct cytoplasmic membrane with pale eosinophilic cytoplasm, vesicular nuclei,

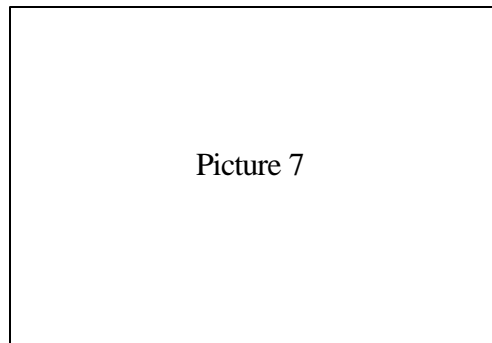


High Power view of the malignant carcinoid Tumour : shows malignant round cells.

coarse granular chromatin and tiny conspicuous nucleoli. Tumour cells are involving the full thickness of the wall of the bowel. Overlying mucosa is ulcerated.

Mesenteric lymph nodes show metastasis. Pelvic nodes also show metastasis. Another bit (bi-

opsy from the atrophied right testis) which is received show presence of seminal vesicles.



Low power view of the malignant carcinoid Tumour

DISCUSSION:

The patient presented with acute intestinal obstruction for which exploratory laparotomy and right hemicolectomy was done. The tumour on biopsy was reported as carcinoid tumour of the distal ileum along with metastases to mesenteric and pelvic lymph nodes.

Doxorubicin is said to give a 20% tumour response rate¹⁰, while Octeotide is useful in controlling diarrhoea in patients having carcinoid syndrome. Some centres have used Interferon⁸ on an experimental basis.

In malignant carcinoid tumour greater than 2x2 cm in size, the incidence of lymph node metastasis is greater than 66%, whereas tumours less than 1x1 cm have an incidence of 5% (lymph node metastases).

For tumours larger than 2 cm arising from the distal ileum, right hemicolectomy is the treatment of choice.⁹

At follow-up after three months the patient had gained 3 kilograms of weight. Repeat ultrasound showed no evidence of metastasis to the liver. So far there has been no case-report of a patient with carcinoid tumour having cryptorchidism.

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