Midgut Carcinoid presenting as Partial Intestinal Obstruction: A Case Report

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***Abstract**: We present a case of 60 year old lady having midgut carcinoid presenting with symptoms of partial intestinal obstruction resection with ileocecal anastomons was done. Relevant clinincal presentation diagnostic features have been discussed. Delay in diagnosis and managent affects the progress.*

INTRODUCTION

Carcinoids, first described 'hormonally active'tumor in 1907 by oberndorfer[1], are well differentiated neuroendocrine tumorswith secretory properties. Seen to affect the distal small bowel. The traditional classification of carcinoid tumor is according to the embryonalsite of origin which includes foregut, midgut and hindgut. Midgutcarcinoid are usually referred to as classic carcinoids. Midgut carcinoid has an early propensity of loco-regional spread but generally follow an indolent course, with many patients with metastatic disease surviving longer than 5 years. Presentation is often nonspecific with symptoms mimicking those of irritable bowel syndrome. Given this, the condition is often diagnosed late following disease progression by which time the prognosis is poor.

CASE REPORT

A 60 years old lady was admitted with chief complaints of intermittent pain in abdomen and vomiting since 1 year. On general examination, she was an elderly lady with average built and nourishment, mild pallor was present. Vital signs were stable. Systemic examination was normal. Base line investigations were normal. CECT abdomen was done which suggested focal segment of small bowel thickening forming a narrow segment (ilealloop of 8 mm thickness with 2 cm length of narrow segment) with the possibility of malignancy[fig 1] for which she underwent exploratory laparotomy. On laparotomy stricture was noted in ileum about two feet proximal toileocaecaljunction with a mass.Resection of diseased segment of ileum along with ileo-ileal anastamosis was done and the specimen was sent for histopathological examination. On histopathology examination, she was diagnosed to have carcinoid, small bowel with immune histochemistryshowing stronglypositiveNSE and synaphtophysin positive[fig 2].Thepatient was discharged in satisfactory condition and is on regular follow up with us.

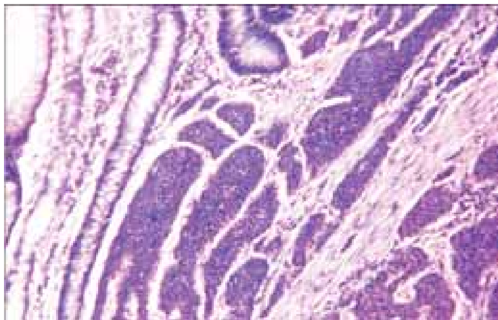

***Fig. 1:** Carcinoid tumour. Solid nests of monotonous tumour cells with round stippled nuclei.*

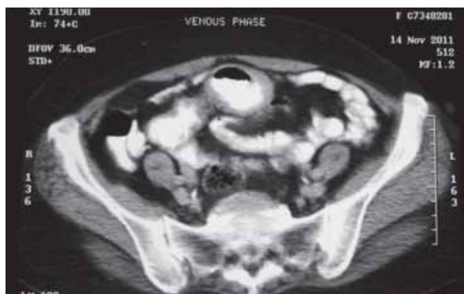

***Fig. 2:** CECT Abdomen-focal segment of small bowel thickening forming, narrow segment.*

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DISCUSSION

The small intestine (ileum) is the most common location for carcinoid tumors, 28% of all carcinoids[3]. The lesions occur 6.5-8.2 times more frequently in the ileum than in the duodenum and jejunum[4] seen mostly in women.

Clinical presentation can be with non-hormonal symptoms to tumor bulk and local reaction, or with symptoms of a functioning tumour, described as 'carcinoid syndrome'. Tumor arising in the small intestine are often silent until late in the disease and are thus locally advanced at presentation[5]. Non-hormonal symptoms are most commonly secondary to partial mechanical obstruction of the small bowel with patients complaining of intermittent vague abdominal symptoms such as pain and distention. The clinical presentation of jejuno-ileal carcinoids differs from, those occurring in other sites of the gut in that they are usually at an advanced stage at the time of presentation. In many instances they are only detected at surgery for unexplained bowel obstruction, perforation, or bleeding.The term "carcinoid syndrome" is used to describe the hormonal manifestation of carcinoid tumors and occurs secondary to the secretion of serotonin, tachykinins, bradykinins and prostaglandins. Midgut carcinoid tumors are typically seen to secrete serotonin[6]. The syndrome occurs when the secretory product of these tumors gain direct access to the systemic circulation and avoid metabolism in the liver[7]. "Carcinoid syndrome" is reported to occur in up to 18% patient with jejuno-ilealcarcinaoids but is rarely evident in carcinoids of the duodenum.

Given that the majority of these tumors are well-differentiated, following an indolent course, prognosis is surprisingly unfavorable. This can mainly be attributed to the fact that the majority of cases present so late that by which time spread has invariably occurred. Survival correlates closely to stage at presentation with a 5-year survival of 65% reported for localized/ regional disease and 36% if distant metastases are present[8]. The principal management approach in these cases is surgical resection of the primary lesion which is the only curative option. With smaller lesions (< 1 cm) local resection is usually adequate. However, with lesions over 1.5 cm there is a high risk of recurrence and thus segmental resection is required with extensive clearance of the associated mesenteric lymph nodes. Surgery has been shown to be of benefit even in patients with metastatic disease, both to gain symptomatic relief and improve survival[8].

CONCLUSION

This paper highlights the issue of delay in diagnosis which eventually affects the management as surgical resection is the only curative treatment of patients with smaller lesions.It is important to keep high suspicion of this disease as a for earlier detection and better outcome

REFERENCES

1) *Oberndorfer S: Karzinoidtumoren des dunndarms.FrankfurtZietschrif fur pathologie 1907, 1:426-429 .*
2) *Modlin I, Lye K, Kidd M. A five- decade analysis of 13,715Carcinoid tumors. Cancer 2003;97:934-959.*
3) *Burke AP, Thomas RM,Elsayed AM, Sobin LH. Carcinoids of the jejunum and ileum: an imunohistochemical and clinicopathologic study of 167 cases. Cancer 1997;79:1086-1093.*
4) *D Sario JA, Brut RW, Vargas H,McWhorter WP. Small bowel cancer: epidemiological and clinical characteristics from a population based registry. Am J Gastroenterol 1994;89:699-701.*
5) *Strodel WE, Vinik AI, Thompson NW,et al: small bowel carcinoid tumors and the carcinoid syndrome. In Endcrine surgery update. Edited by Thompson NW, Vinik AI. New York, NY: Grune and Stratton; 1983:277-291.*
6) *Basson MD, AhlmanH,WangbergB,et al: Biology and management of the carcinoid.Am J Surgery 1993, 165:288-297. Pubmed abstract.*
7) *The M.D.Anderson Surgical OncologyHandbook , Fourth Edition: small bowel malignancies and carcinoid tumors; pg-244.*
8) *Eriksson B, Klopel G, Krenning E, et al: Consensus Guidelines for the management of patient with digestive neuroendocrine tumors – well differentiated jejuno-ileal tumor / carcinoma.*