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Case Report

Cecal Carcinoid Tumor in a Nigerian Man: A Case Report and Review of Literature

OA Obateru, JA Taiwo[1], S Oladejo[2], DA Awelimobor[3], OO Fadaunsi[3], AB Olokoba[4]

Gastroenterology Unit, Departments of Medicine, [1]Surgery, [2]Anaesthesia and [3]Pathology, Federal Medical Centre, Lokoja, [4]Gastrointestinal Unit, University of Ilorin Teaching Hospital, Ilorin, Nigeria

Abstract

Carcinoid tumors are rare neuroendocrine tumors that have been reported in a wide range of organs but most commonly involve the gastrointestinal tract (stomach, ileum, appendix, and colon), and rarely ovary and thymus. We present a case of a 56-year-old Nigerian man with a cecal carcinoid tumor that was surgically removed. A 56-year-old Nigerian man, presented to our hospital with a year history of right-sided lower abdominal fullness, audible bowel sounds, occasional diarrhea, nausea, vomiting, and epigastric pain. There was no history of hematochezia or passage of melena stool. Colonoscopy revealed a cecal mass occupying more than two-thirds of the cecal lumen. Histology confirmed carcinoid tumor (well-differentiated neuroendocrine tumor), which was surgically removed. Carcinoid tumors are slow growing rare neuroendocrine tumors. Mortality is low if it is diagnosed early.

Keywords: *Carcinoid tumor, cecal, gastrointestinal, slow growing*

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Introduction

Carcinoid tumor is a rare, slow-growing type of neuroendocrine tumor originating from the cells of the neuroendocrine system (enterochromaffin or Kulchitsky's cells).[1,2] These tumors have been reported in a wide range of organs but it most commonly involve the lungs, bronchi, and gastrointestinal (GI) tract.[2] The incidence of carcinoid tumor is estimated at 1–2 cases per 100,000.[3,4] Other studies have found carcinoid tumors in approximately 1.0% of necropsies.[2,4] Over two-thirds of carcinoid tumors are found in the GI tract.[5,6] The release of serotonin and other vasoactive substances into the systemic circulation is thought to cause the carcinoid syndrome, the manifestations of which are episodic flushing, wheezing, diarrhea, and eventual right-sided valvular heart disease.[5] This constellation of symptoms is called carcinoid syndrome. Colonic carcinoids make up less than 1% of colonic tumors.[1,7] Patients with colonic carcinoids most commonly present in the seventh decade of life with symptoms of pain, anorexia, or weight loss.[8] Approximately two-thirds of these tumors are found in the right side of the colon, most of them in the cecum.[9] In rare cases, when patients present with early-stage disease, local excision has been reported to be effective.[1] The majority of patients, however, are treated with radical colectomy.[1,9]

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Case Report

A 56-year-old Nigerian man, presented to our hospital with a year's history of right-sided lower abdominal fullness, audible bowel sounds, occasional diarrhea, nausea, vomiting, and epigastric pain. There was no history of wheezing, flushing, weight loss, jaundice, hematochezia or passage of melena stool. A general physical examination was essentially normal. A complete blood count, liver function test, blood chemistry, electrocardiographic findings, and chest x-ray were also essentially normal. Urinary 5-hydroxy indole-acetic acid (5-HIAA) and serum serotonin were normal. Abdominal computerized tomography (CT) scan revealed a cecal mass with no evidence of lymph node involvement or metastases. Colonoscopy revealed a right-sided cecal

Address for correspondence: Dr. AB Olokoba, Gastrointestinal Unit, University of Ilorin Teaching Hospital, Ilorin, Nigeria.
E-mail: drabolokoba@yahoo.com

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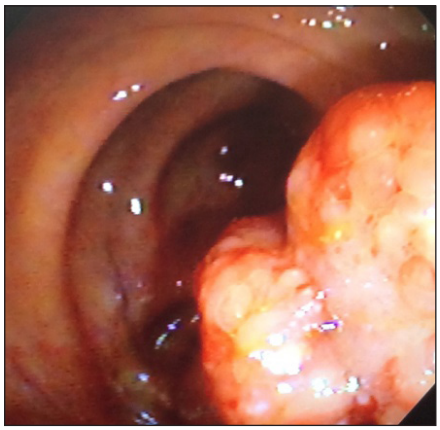

Figure 1: Caecal mass

Figure 2: Excised carcinoid tumor with part of the colon

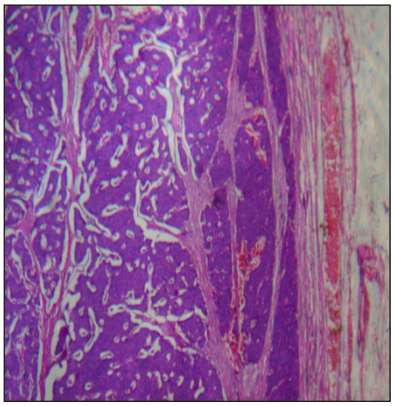

Figure 3: Histology of carcinoid tumor (well-differentiated neuroendocrine tumor)

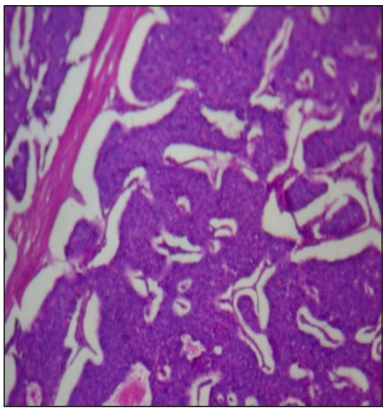

Figure 4: Histology of carcinoid tumor (well-differentiated neuroendocrine tumor)

mass occupying more than two-thirds of the cecal lumen [Figure 1]. Exploratory laparotomy was carried out in which a tumor measuring about 11 cm by 9 cm attached to the cacum was seen. There was no evidence of lymph node involvement. A hemicolectomy was carried out, and the tumor was removed with part of the colon [Figure 2]. Histology confirmed carcinoid tumor (well-differentiated neuroendocrine tumor) [Figures 3 and 4]. The patient was discharged eighth day postoperatively. He is presently doing well with resolution of his abdominal symptoms, and being followed up and evaluated for any evidence of metastasis with periodic abdominal CT scan, and urinary 5-HIAA every 3 months.

Discussion

Carcinoid tumors are slow-growing with diverse biologic and clinical features.[6] Patients with colonic carcinoid tumors most commonly present in the seventh decade of life with a slight female predominance.[8] Approximately, two-thirds of these tumors are found in the right side of the colon, most of them in the cecum.[1,6,10] Our patient was a 56-year-old Nigerian man who had a cecal carcinoid tumor, which was seen at colonoscopy and confirmed histologically. The literature have reported the absence of carcinoid syndrome in over 95% of patients with the carcinoid tumor.[1,3,10-12] Most patients do not become symptomatic until they have advanced disease. Our patient did not have clinical features of carcinoid syndrome at presentation.

The average tumor diameter at presentation is 2–10 cm, and over two-thirds of patients have either nodal or distant disease at the time of presentation.[12,13] The size of the tumor that was radically removed in our patient was 11 cm by 9 cm. In rare cases, when patients present with early-stage disease, local excision has been reported to be effective.[1,9] The majority of patients, however, are treated with radical colectomy. Our patient had a fairly big tumor for which he had hemicolectomy at laparotomy. It has been reported that carcinoid tumor is rare in our environment.[14] This fact is buttressed by our patient being the first documented case of cecal carcinoid tumor in our hospital. Serum levels of serotonin and other vaso-active peptides need to be measured especially when there are clinical features of carcinoid syndrome, and further investigations which include CT should be carried out to look for any possible metastasis.[14] Our

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patient did not have features of carcinoid syndrome, and his urinary (5-HIAA), and serum serotonin were normal. He had resolution of his abdominal symptoms, and he is being followed up post-op for any possible evidence of tumor recurrence or metastasis.

Conclusion

Carcinoid tumors are one of the very few tumors with potential of complete cure, if diagnosed and removed early. Surgical resection remains the treatment of choice for primary and respectable disease. This should be done as early as possible before metastasis occurs.

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Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Kulke MH, Mayer RJ. Carcinoid tumours. N Engl J Med 1999;340:858-68.
2. Nikuo GC, Lygidakis NJ, Toubanakis C, Pavlutos S, Tseleni-Balafouta S, Gianntuo E. *et al.* Current diagnosis and treatment of gastrointestinal carcinoids in a series of 101 patients: The significance of serum chromogranin-A, somatostatin receptor scintigraphy and somatostatin analogues. Hepatogastroenterology 2005;52:731-41.
3. Maggard MA, O'Connell JB, Ko CY. Updated population-based review of carcinoid tumors. Ann Surg 2004;240:117-22.
4. Hodgson HJ. Carcinoid tumors and the carcinoid syndrome. In: Bonchier IA, Allan RN, Hodgson HJ, *et al.*, editors. Gastroenterology: Clinical Science and Practice. London: WB Sanders; 1992:643-58.
5. Ha J, Tan WA. Gastrointestinal carcinoid tumours: A review. Gastrointest Dig Syst. 2012;2:2.
6. Modlin IM, Lye KD, Kidd M. A 5-decade analysis of 13,715 carcinoid tumors. Cancer 2003;97:934-59.
7. Modlin IM, Sandor A. An analysis of 8305 cases of carcinoid tumors. Cancer 1997;79:813-29.
8. Rosenberg JM, Welch JP. Carcinoid tumors of the colon: A study of 72 patients. Am J Surg 1985;149:775-9.
9. Ballantyne GH, Savoca PE, Flannery JT, Ahlman MH, Modlin IM. Incidence and mortality of carcinoids of the colon: data from the Connecticut Tumor Registry. Cancer 1992;69:2400-5.
10. Berardi RS. Carcinoid tumors of the colon (exclusive of the rectum): Review of the literature. Dis Colon Rectum 1972;15:383-91.
11. Waisberg DR, Fava AS, Martins LC, Matos LL, Franco MI, Waisberg J. Colonic carcinoid tumors: A clinicopathologic study of 23 patients from a single institution. Arg Gastroenterol 2009;46:288-93.
12. Spread C, Berkel H, Jewell L, Jenkins H, Yakimets W. Colon carcinoid tumors. A population-based study. Dis Colon Rectum 1994;37:482-91.
13. Murray SE, Lloyd RV, Sippel RS, Chen H. Clinicopathologic characteristics of colonic carcinoid tumors. J Surg Res 2013;184:183-8.
14. Mohammed U, Iliyasu Y, Ahmed SA, Shehu MS. Carcinoid tumours in a tertiary hospital in northern Nigeria: Morphological pattern and review of the literature. West Afr J Med 2013;32:254-6.