

Case Report

Carcinoid tumor of appendix: Case Report

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Abstract

Carcinoid tumor of appendix is rare and usually detected incidentally in appendectomy, it is considered the most common type of appendiceal primary malignant lesion, and is found in 0.3%-0.9% of patients undergoing appendectomy. We present a case of 25 year old female diagnosed with carcinoid appendix.

Keywords: Carcinoid tumor; Appendix; Appendectomy

1. Introduction

Carcinoid tumors of the appendix are rare.¹ Their incidence in appendectomy specimens ranges from 0.3% to 0.9%.² It is considered the most common type of appendiceal primary malignant lesion. Its clinical presentation can be either that of acute appendicitis or nonspecific right lower quadrant pain, and its course is usually benign. Metastatic disease is uncommon and carries a bad prognosis.

In the majority of cases, appendectomy alone is curative. According to the literature, the factor that influences the type of surgery in most patients is the size of the tumor. Most authors agree that for tumors <1 cm in diameter, simple appendectomy is sufficient, whereas when the tumor is >2 cm, an ileocecal resection or even right hemicolectomy is indicated. Some controversy exists about what is the best strategy for tumors between 1 and 2 cm because the frequency of metastases in these cases is unknown.³

2. Case study

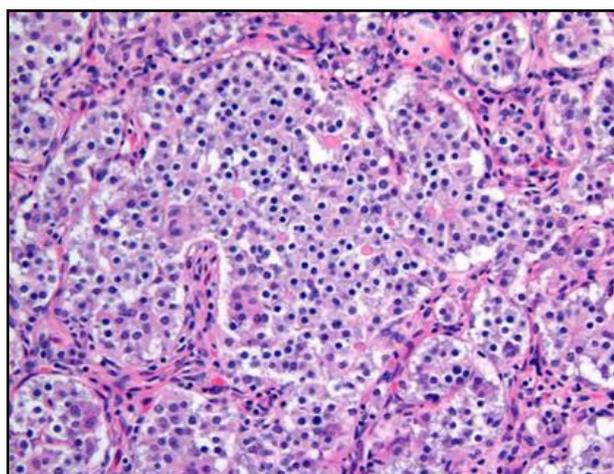
A 22 year old female came to emergency department with acute onset of pain in right lower abdomen. There was no history of fever and vomiting. There was no history suggestive of urinary tract infection and menstrual disturbances. She had tenderness and rebound tenderness in right iliac fossa. Her total count was 13,000 cmm³. Her other blood investigations was normal. Ultrasound abdomen was consistent with our clinical diagnosis of acute appendicitis.

Patient was taken up for emergency appendectomy. Intraoperatively acute inflamed appendix was present. (Figure 1) Appendectomy was done. Histopathology report was acute appendicitis with carcinoid tumor involving the tip (<1 cm) and extending up to muscle layer. (Figure 2) The proximal surgical margin is free from tumor.

Figure 1: Appendectomy



Figure 2: Histopathology report of acute appendicitis



3. Discussion

In 1888 Otto Lubarsch first described Carcinoid tumors⁴. The cell of origin is enterochromaffin cell disseminated throughout the gastrointestinal tract and the bronchopulmonary system. They secrete serotonin which is responsible for the classic symptoms of carcinoid syndrome ie. diarrhea, flushing, bronchospasm, and eventual right-sided valvular heart disease⁵.

Upto 45 percent they are located in small intestine. The clinical course and prognosis of carcinoid tumors vary widely depending on the location and the size of the primary tumor. Carcinoids are rare and most common neoplasm of the appendix in adults.⁶ They are found incidentally during appendectomy and the diagnosis is confirmed by histopathology.⁷ Its frequency in histologically examined appendiceal specimens from children ranges between 0.085% and 0.169%^{8,9}.

The tumor is located at the tip of the appendix in up to 75 % of cases and is <1 cm in diameter. In our case also the clinical diagnosis was acute appendicitis. Appendectomy was done. Histopathology was carcinoid tumor involving <1 cm of tip of appendix. Patient was discharged on postoperative day 4 without any complication. Patient is on regular follow up every 3 month since 6 months without any recurrence and spread.

4. Conclusion

Diagnosis of Carcinoid tumor though they are rare but should be kept in mind while operating for appendicitis.

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