



CARCINOID OF BASE OF APPENDIX PRESENTING AS ACUTE APPENDICITIS – A RARE CASE – A CASE REPORT

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ABSTRACT **INTRODUCTION :** Appendix is the 3rd most common site of gastrointestinal neuro endocrine neoplasia(GINEN). Base of appendix is the rarest site of carcinoid in appendix.

AIM : To report a case of carcinoid of base of the appendix

CASE DETAILS : 17 year old girl presented with recurrent abdominal pain. Abdomen pain was localized to right lower abdomen suggestive of acute appendicitis. USG of abdomen, CECT scan confirmed complicated acute appendicitis with mass. Exploration and appendectomy was done. Histopathology showed carcinoid of base of appendix with inflamed appendix without any mesenteric nodes. Chromogranin A was positive. Followup was unremarkable.

CONCLUSION : Carcinoid of the base of appendix(rarest site in appendix) presenting as acute appendicitis is being reported.

KEYWORDS :

INTRODUCTION:

Carcinoid is a type of Gastrointestinal neuro endocrine neoplasia (GINEN). Most common site is small bowel followed by rectum and appendix is 3rd in order. Commonest presentation of carcinoid of appendix is incidental histopathological finding.

Commonest site of carcinoid appendix is body and tip. Base of appendix is the rarest site in appendix.

AIMS AND OBJECTIVES:

To report a rare case of rarest site of appendiceal carcinoid at the base of appendix.

CASE DETAILS:

17 years old lady presented with vague persistent abdominal pain. She had similar episodes earlier and occasionally associated with nausea and vomiting. There was no history of protracted diarrhea, sweating or asthma like picture. Clinical examination revealed right lower abdomen tenderness with guarding and rigidity. A clinical suspicion of acute appendicitis was confirmed by ultrasound which showed appendicular mass. In view of recurrent abdominal pain, a CECT scan was performed. CECT scan showed periappendiceal collection, mesentery was reported to be normal with out any any lymph nodes(Fig 1A,B). Exploratory laparotomy revealed inflamed, turgid, ruptured appendix with periappendiceal collection. Appendectomy and peritoneal lavage was done. Post operative period was uneventful. Gross examination of specimen showed mass at the base of appendix about 1.8cm(FIG 1C) with evidence of inflammation of distal appendix.

Histopathology showed nest of round cells suggestive of carcinoid tumor(Fig1D).Chromogranin A was strongly positive. Follow up period she did not have any symptoms of carcinoid syndrome.

DISCUSSION:

Carcinoid of appendix is a type of GINEN's appendix is 3rd most common site of carcinoid tumor¹.The incidence of GINEN's ranged from 11 to 54.4%^{1,2}. Most of the carcinoids of the appendix are incidentally found on histopathological examination. The incidence varies from 0.15 to 0.16 per 100,000 people³. Commonest site of appendiceal carcinoid is tip of appendix. 2/3rds occur at the tip. Base of the appendix is least common site of carcinoid of the appendix^{1,2,3,4,5,6}.

Carcinoid tumor arises from kulchitsky cells which are modified neuroendocrine cells. Carcinoid of the appendix is commonly seen in women, male:female ranged from 12% in men and 23.1% in women^{2,3,4}. Treatment of carcinoid tumor of tip and body of the appendix is controversial, ranging from simple appendectomy at one end and right hemicolectomy on the other^{1,2}. Small appendiceal tumors

with out lymph nodes may not require right hemicolectomy. Large tumors >2 cm and without lymphnodes may be treated with simple appendectomy. Large tumors >2 cms with regional lymph nodes may require right hemicolectomy. TNM staging, mitotic index, serum chromogranin A, tumor size have all been taken into consideration for decision of radical right hemicolectomy². Tumor size in TNM form the main criterion with or without metastasis to mesenteric lymph nodes.

Mitotic index² has also been graded based on mitosis seen per 10 high power fields. Histological grading² has been described from grade 1 to grade 3 based on <2%/high power field – Grade1; 3-10%/high power field – Grade2; >20%/10 high power field – Grade3. Based on WHO & TNM classification and ENET staging system according to UICC/AJCC^{1,2} age, sex, histological tumor type, tumor size, degree of extension, lymph node involvement, serum chromogranin A have all been markers of prognostification and indicators of choice for either simple appendectomy or radical appendectomy.

The present index case has tumor <2 cm with out regional lymph nodes and tissue chromogranin A was strongly positive. The index case did not have mesenteric lymph nodes, any vascular or lymphatic invasion on histopathology and size was <2 cm. Hence the patient is kept under observation and on regular followup.

CONCLUSION:

Rare case of carcinoid of the base of appendix (rarest site of appendiceal carcinoid) is being reported.

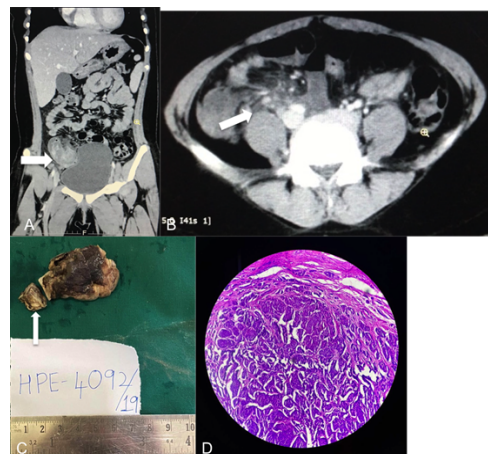


Figure 1

LEGEND FOR FIGURE 1

- A. Coronal CECT showing Appendiceal mass.
- B. Axial CECT showing Appendiceal mass.
- C. Gross specimen, arrow showing homogenous mass at base of appendix.
- D. Histopathology showing cluster of round cells.

CONFLICTS OF INTEREST:

The authors declare no conflicts of interest.

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