

PRIMARY MUCINOUS ADENOCARCINOMA OF APPENDIX – CASE REPORT

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ABSTRACT

We report a mucinous type adenocarcinoma of appendix in a 40 year old male. The preoperative diagnosis was acute appendicitis and emergency appendectomy was performed. Histopathology was positive for appendiceal mucinous adenocarcinoma, localized to appendix. Followup investigations for staging did not show any growth or metastasis and patient did not agree for right hemicolectomy.

Keywords: Adenocarcinoma, appendicitis, appendectomy

INTRODUCTION

Adenocarcinoma of appendix is rare finding (0.01-0.2%), and very few cases have been reported in literature. Clinically, it commonly presents as appendicitis, but may also present with right iliac fossa mass, pseudomyxoma peritonei and intestinal obstruction. Intraoperative evaluation for tumor limited to appendix is not possible and is usually diagnosed after histopathological inspection of specimen after removal for suspected appendicitis. Ulcerative colitis is a known risk for malignant transformation due to similar type of colonic epithelium in appendix. (1,2,3,4)

We report a case of mucinous adenocarcinoma of appendix on an appendectomy specimen, which was removed for appendicitis.

CASE STUDY

A 40 year old male presented to the surgical ward with symptoms of lower abdominal pain and vomiting since 3 days. Emergency ultrasound

revealed appendicitis. Baseline tests were normal with an elevated WBC count. Clinical examination of abdomen revealed guarding and tenderness in the right lower quadrant with rebound tenderness.

Laparoscopic appendectomy was done on an emergency basis and specimen sent for histopathology. Grossly, specimen was 5x2.5 cm. External surface revealed congested blood vessels. Histopathology sections revealed dysplastic lining mucosa with tumor cells infiltrating deep into muscular layer (Fig 1). Extensive areas of mucin pools surrounding tumor cells were seen (Fig 2). A histopathological diagnosis of well differentiated mucinous adenocarcinoma of appendix was given.

Later staging examination by Chest X-ray, Computed Tomography, colonoscopy and repeat ultrasound done revealed no nodes or any masses. Patient rejected right hemicolectomy and after follow-up of three months, no complications were noted.

DISCUSSION

Primary adenocarcinoma of appendix is a rare finding with less than 300 cases reported in literature and preoperative detection of appendiceal adenocarcinoma is rarely feasible via direct visualization during colonoscopic examination, unless it involves the appendiceal stump. (2)

The carcinoid tumor is the most common type of appendiceal primary malignant tumour followed by adenocarcinomas. Appendix adenocarcinomas are of 2 types – Mucinous adenocarcinoma and colonic adenocarcinoma. 40% of them are mucin secreting mucinous adenocarcinomas. The mean

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age of diagnosis of appendiceal adenocarcinomas is 56 years with a slight male predominance. (5,6)

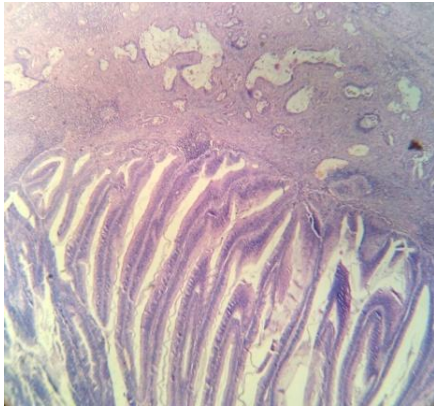


Fig 1: Section shows dysplastic mucosa with mucin pools in submucosa. 10 X H&E

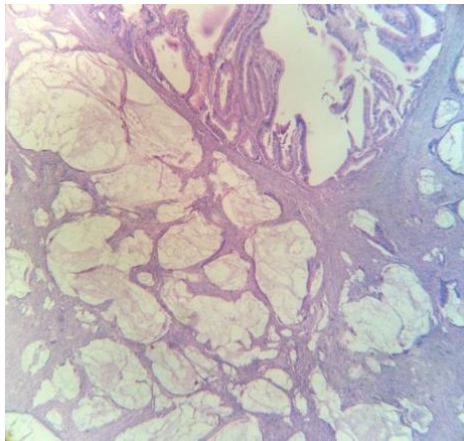


Fig 2: Section shows pools of mucin extending into muscularis layer. 10X H&E

Carcinoma of appendix presents numerous dilemmas. In a patient presenting with appendicitis, as in the present scenario, a post-operative diagnosis of adenocarcinoma of appendix requires an additional surgery involving hemicolectomy. The possibility of patient developing adenocarcinoma in the appendicular stump should be borne in mind and need for right hemicolectomy should be explained to the patient. Right hemicolectomy is mandatory for colonic type adenocarcinomas, whereas mucinous

cystadenocarcinomas have better prognosis and can be followed up after appendicectomy. Our patient, being young, and able to tolerate a surgery, was advised right hemicolectomy. Patient rejected second operation. (1,2)

CONCLUSION

Diagnosis of malignancies of appendix should be kept in mind, even though rare, while operating for appendicitis.

REFERENCES

1. Pasternak A, Pach R, Szura M, Solecki R, Tomaszewski KA, Szczepanski W, et al. Primary adenocarcinoma of the appendix – a case report. *Pol Przegl Chir.* 2014;86(7):333-6.
2. Grover AS, Mittal S, Singla P, Singh P, Kapoor W. Cystadenocarcinoma of appendix with cutaneous fistula – An unusual case presentation. *Indian J Surg.* 2005;67(5):267-9.
3. Rassa PC, Cassinelli G, Ronzitti F, Bronzino P, Stanizzi T, Casaccia M. Primary adenocarcinoma of appendix. Case report and review of literature. *Minerva Chir.* 2002;57(5):695-8.
4. Nishikawa T, Yokoyama T, Tanaka T, Tanaka J, Kiyomatsu T, Kawai K, et al. Appendiceal mucocoele caused by adenocarcinoma in ulcerative colitis. *Austin J Med Oncol.* 2014;1(1):1-3.
5. Paltaci I, Temiz M, Buyukerkmen E. Mucinous cystadenocarcinoma of the appendix: A case report. *International journal of advances in case reports* 2015;2(2):88-90.
6. Agrawal VP, Wasnik N, Gupta A, Yede J, Gaurav G. Carcinoid tumor of appendix: Case report. *International journal of biomedical research* 2014;5(10):655-6.