ISSN: 0975-8585

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Primary Squamous Cell Carcinoma of Caecum: A Case Report.

Dinesh Kulkarni[1]*, and Ramesh Satarkar[2]

[1]Consultant Histopathologist, Saurabh Histopathology Cytology Centre, Aurangabad - 431005 Maharashtra, India.
[2]Consultant Gastroenterologist, Satarkar Gastroenterology Centre, Aurangabad- 431005, Maharashtra India.

ABSTRACT

Primary squamous cell carcinoma of caecum is very rare malignant neoplasm. Here we present a case of well differentiated keratinizing primary squamous cell carcinoma of caecum in a fifty year old female. The neoplasm originated from surface epithelium of caecum and invaded upto muscularis propria. Per rectal and per vaginal examination did not reveal any abnormality there. Clinically she presented with features of subacute intestinal obstruction. Histopathological examination of resected right hemocolectomy specimen showed features of be squamous cell carcinoma. Postoperative chemotherapy was given to eradicate micrometastasis. The case is being reported for it's rare occurance.

Keywords: Primary squamous cell carcinoma, caecum

Corresponding author

ISSN: 0975-8585

INTRODUCTION

Proximal to the anal canal, primary squamous cell carcinoma (SCC) is very rare [1]. The frequency of SCC in colon and upper rectum is 0.05% of adenocarcinoma [2]. Any malignancy 7 cm proximal to the dentate line should not be considered as primary SCC [3]. Squamous cell carcinoma is predominant in right side of colon than adenocarcinoma [4]. Before labeling such a case as primary carcinoma, one must exclude the possibilities of metastatic deposits in caecum from a source elsewhere or direct extension from other sites [1]. Ulcerative colitis, schistosomiasis, pelvic irradiation, villous adenoma and duplication of intestine are a few conditions believed to induce squamous cell carcinoma in colon [3-5]. However, no such predisposing factors were detected in our case.

Case Report

A fifty year old female was admitted with complaints of severe abdominal pain and constipation. She had history of loss of appetite and weakness for last 3-4 months. On examination she had a firm illdefined nontender palpable mass in (Rt) iliac fossa. Per rectal and per vaginal examination did not reveal any abnormality. So, the probable diagnosis of subacute intestinal obstruction of tuberculous origin was considered.

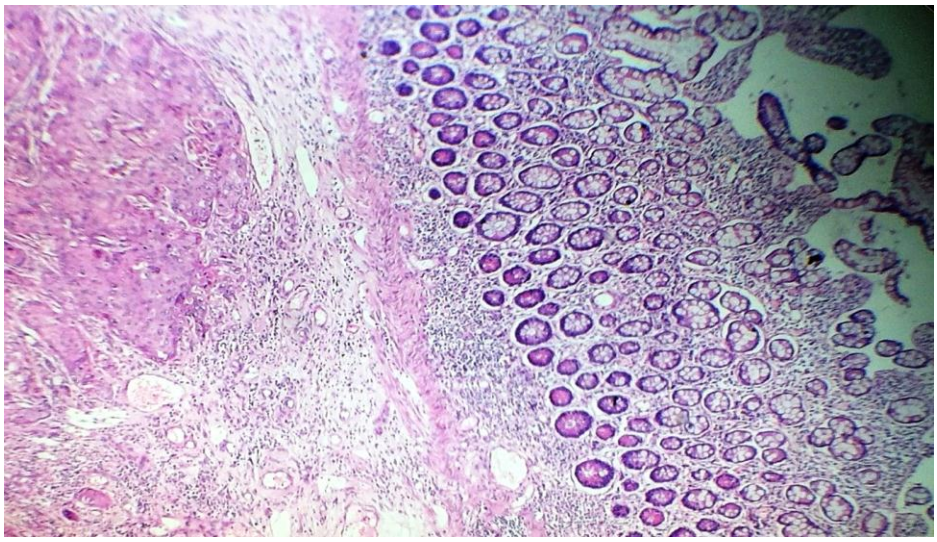
Blood investigations revealed anemia of moderate degree, WBC count was within normal limits with lymphocytosis of 42%. Abdominal sonography showed a heterogenous space occupying lesion in (Rt) iliac fossa with bowel wall thickening.Exploratory laparotomy showed a firm to hard mass of 5x3 cm in caecum with thickened wall, limited to caecum. No other lesion was found in other parts of intestine and adjoining viscera.

Pathological Findings

Gross Examination

Received (Rt) hemicolectomy specimen with terminal ileum, caecum with mass and appendix with ascending and transverse colon along with mesocolon, overall measuring 45 cm in length. On careful dissection of intestinal segment, a hard mass of 5.5x3.5 cm encircling caecum was detected. The tumour mass was arising from mucosa and was graywhite on cut surface, soft with areas of necrosis. The caecal wall was thickened. Proximal and distal resected margins appeared free from tumour. No lymphnodes were detected in mesentery and mesocolon.

Microscopic Examination



Section from tumour mass shows caecal mucosa lined by columnar and plenty of goblet cells (Rt). Underneath area has islands of round to polygonal cells containing hyperchromatic nuclei. Abundant keratin is evident (Lt). Surrounding stroma is fibrous with infiltration by lymphocytes and blood vessels in submucosa. (H & E 10 x10 X)

Multiple serial sections from various areas of tumour along with caecal mucosa revealed caecal mucosa along with tumour mass arranged in groups separated by fibrous septae consisting of round to polygonal cells containing hyperchromatic nuclei. Plenty of keratin pearls seen. The tumour invaded muscularis. The diagnosis of Squamous cell carcinoma grade II invading muscularis was made. No mucin was seen. (Fig. 1).

DISCUSSION

The first case of squamous cell carcinoma of colon was reported by Schmidtman in 1919 from a 65 year old male [1]. Till date only three cases of SCC of right sided colon have been reported from Indian subcontinent and two of them were arising primarily from caecum [1,3].

Primary Squamous cell carcinoma of colon is diagnosed on following criteria [1]

- No other lesion of Squamous cell carcinoma exists elsewhere that could be a source of metastasis or direct extension.
- No contiguity should exist between tumour and anal squamous epithelium.
- The affected segment of bowel is not in continuity with squamous epithelium lined fistula.
- Mucin should be absent.
- Keratin pearls may or may not be seen.

All above mentioned criteria were fulfilled in our case.

In the literature several theories have been put forth regarding possible pathogenesis of primary SCC of colon.

- Squamous metaplasia of glandular epithelium from chronic irritation,
- Malignant transformation of heterotrophic rests of squamous epithelium in submucosa,
- Aberrent differentiation of multipotential colonic stem cells to squamous cells due to genomic derangement and subsequent malignant change,
- De novo origin from embryonal nests of ectodermal cells, and
- Mucosal injury causing proliferation of uncommitted reserve or basal cells.

Recent trend shows gradual increase in (Rt) hemicolon malignancies with increase in patient age. The clinical features of primary squamous cell carcinoma is same as those of adenocarcinoma of colon. The college of American Pathologists suggested that a minimum 12-15 lymphnodes should be examined to determine node negativity [1]. In the present case serosa was uninvolved and no nodes were detected in mesocolon. The overall survival rate for these patients was 30%, less than 50% of adenocarcinoma. Squamous cell carcinoma of colon is extremely rare and the survival is related to Dukes' staging [6].

REFERENCES

[1] Santosh Kumar Mondal. JCRT 2009; 5(4):328-30
[2] Horne BD, McCulloch CF. Cancer 1978;42:1879-82
[3] Bhat S, Pai M, Premnath RP. Ind J Cancer 2003;40:118-19
[4] Platt CC, Haboubi NY, Schofield PF. J Clin Pathol 1999;44:253-54
[5] Ganesh MS, Ayyappan S, Majhi U. Ind J Cancer 1999;36:190-91
[6] Harry S. Cooper – Intestinal Neoplasms. In Sternberg's Diagnostic Surgical Pathology, vol II; Stacey E.Mills: fifth edition; Lippincot Williams & Wilkins, fourth edition, Phildelphia 2004,1398.