

Case Report

Adenocarcinoma of Caecum Presenting as Ileo-Appendico-Colic Intussusception

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Abstract: Intussusception in an adult is a rare condition as compared to pediatric intussusception. Adult intussusception constitutes approximately 5% of all intussusceptions. We present an unusual case of adult intussusception clinically suspected as a case of acute appendicitis. Radiological investigation revealed ileo-appendico-colic intussusception with inflamed appendix as a lead point. Patient underwent emergency laparotomy for the same. On histopathological examination adenocarcinoma of the caecum was confirmed as the cause of intussusception leading to acute intestinal obstruction.

Keywords: Adult intussusception, Adenocarcinoma caecum, Acute abdomen

INTRODUCTION

Intussusception is telescopic invagination of a proximal segment of the bowel into the adjacent distal segment of the bowel. Intussusception is mostly noted in the pediatric age group with approximately 5% of the cases occurring in adults accounting to 1% of cases of intestinal obstruction [1-3]. Adult intussusception is usually presented as acute intestinal obstruction requiring immediate management. In most of the cases of adult intussusception malignant tumour is the lead point. We report this case of adult intussusception presenting as acute abdomen and histopathological examination proving adenocarcinoma as the lead point.

CASE REPORT

A 43 year old male patient reported in the surgery clinic with the complaints of pain in the abdomen localized to right iliac fossa of 15 days duration. Pain was intermittent in nature and was not associated with fever. There was no contributory past or family history. On physical examination, abdomen was soft and tender with no obvious mass noted. Clinical diagnosis of acute abdomen related to appendicitis was made.

Ultrasonography revealed ileo-appendico-colic intussusception with inflamed appendix as a lead point. Patient underwent laparotomy and hemicolectomy was performed. Resected specimen was sent for histopathological examination. On gross examination specimen measured 30 cm in length with ileum, caecum and appendix invaginating into the ascending colon

(Fig. 1). On cutting open, an ulceroinfiltrative growth measuring 5.2 x 2.8 x 1.2 cm was noted in the caecal region (Fig. 2).



Fig. 1: Photograph showing invagination of terminal ileum with caecum and appendix into ascending colon



Fig. 2: Photograph showing ulceroinfiltrative growth in the caecum

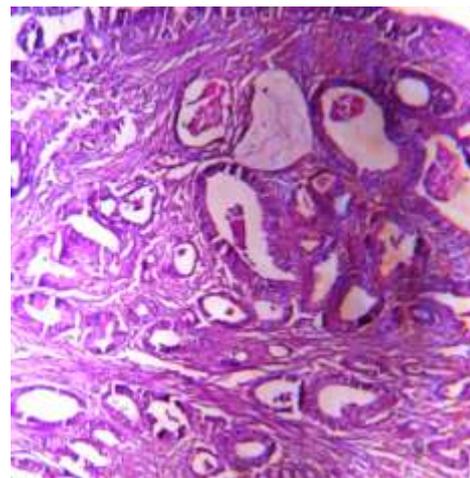


Fig. 3: Photomicrograph showing glandular pattern of tumour cells

Microscopic examination showed a tumour composed of neoplastic cells arranged in glandular pattern alongwith intracellular and extracellular mucin (Fig. 3). Some glands were cystically dilated and filled with mucin. Neoplastic cells had mild to moderate pleomorphic hyperchromatic or vesicular nuclei with 1-2 prominent nucleoli and ample amount of eosinophilic cytoplasm. Tumour was involving full thickness of caecal wall (Figure 4) and extending till the base of appendix. Final diagnosis of well to moderately differentiated adenocarcinoma (mucinous) of caecum with chronic non specific appendicitis was given. No regional lymphnode was involved.

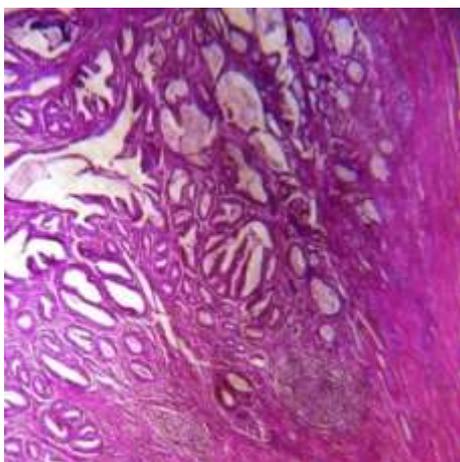


Fig. 4: Photomicrograph showing tumour invading the muscularis layer of caecum

DISCUSSION

Intussusception means invagination of a proximal segment of the bowel into the adjacent distal segment of the bowel. Intussusception was first described by Barbet in 1674 and since then it has been considered as disease of infancy and childhood [4]. Adult intussusception is very rare constituting approximately only 5% of all cases of intussusception. Intussusceptions are classified on the basis of their location as enteric, colonic and ileocaecal or ileocolic with latter forming 15% of all the intussusceptions [4, 5]. In our case, a part of terminal ileum along with caecum and appendix invaginated into the ascending colon.

The clinical presentation is very non specific in adults which makes it difficult to diagnose. Most common presenting complaints are pain in abdomen, nausea, diarrhea and bleeding per rectum. In our case patient presented with pain in abdomen and vomiting with no history of bleeding per rectum. Useful mode of investigations for diagnosis includes ultrasonography, computed tomography and barium studies. In our case patient only underwent ultrasonographic examination revealing ileocolic intussusception with appendicitis as a lead point.

In view of uncertain aetiology, varying duration of symptoms and high incidence of malignancy in adults, surgical resection of intussusception without reduction is recommended [2, 6, 7]. In our case patient underwent surgical resection without reduction.

Intussusception in pediatric age group is mostly idiopathic whereas in adults, in 90% of the cases a lead point can be identified. In around 65% of cases the cause can be either benign or malignant neoplasm [8, 9]. The incidence of malignant neoplasm is between 50%-71% in cases of colonic intussusceptions [9,10]. In our case on radiological investigation inflamed appendix was given as lead point whereas after

histopathological evaluation adenocarcinoma of caecum was confirmed as the cause of intussusception.

Post operatively radiological investigation revealed no evidence of metastasis. On follow up patient is doing well.

CONCLUSION

Intussusception is a rare condition in adult population. Presenting symptoms are non specific and vague. A high index of suspicion and appropriate investigation can help in early diagnosis and prompt management as in adults most of the cases of intussusception have malignancy as a lead point.

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