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A comprehensive approach towards intussusceptions in 61-year-old female: A case report

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ABSTRACT

Intussusceptions are a common condition seen in children and are rarely seen in adults the etiology is not clearly understood the common know etiology for intussusceptions are polyps, Mikel's diverticulum, carcinomas and idiopathic. The patient presents with nonspecific abdominal pain, vomiting, loss of weight, emaciation, weakness, diarrhoea and in long-standing may lead to anorexia. Due to the low specificity of radiographs, USG is the more specific diagnostic tool for locating the intussusceptions. Here we present a 61-year-old patient who reported to the hospital with pain in the abdomen for two months on clinical examination and USG the patient showed signs of ileocecal intussusceptions which was managed by surgical resection and followed by medication post-operatively the patient was observed for 20 days and the sutures were removed and the patient was discharged. We conclude that surgical resection in the cases of ileocecal intussusceptions proved to be the most effective tool for relieving the symptoms and improving the functionality of the patient.

Keywords: Ileocecal intussusceptions, Adult intussusceptions, Case report

1. INTRODUCTION

Intussusception is a rare condition in adults the first case was reported in the year 1674 (De Moulin, 1985). It refers to obstruction in the bowel and is defined as the telescoping of the proximal segment of the gastrointestinal tract (GIT), into the adjacent distal segment of the GIT. Adult intussusception accounts only for 1%-5% of intestinal obstruction in adults. In children, the presentation is less severe and reduction may serve the purpose in 80% of children.

While 90% of adult intussusceptions are secondary to pathological conditions, one of the leading causes of strictures, polyps, carcinomas and colonic diverticulum, which are discovered at the time of surgery (Azar and Berger, 1997). Therefore radiologic decompression is avoided in most cases preoperatively and is a definite treatment approach in which surgical resection is the main stay of the treatment (Begos et al., 1997).

The common site of intussusceptions at the junction of freely moving segments behind the peritoneum, they are classified based on the location,

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aetiology (benign, malignant) and due to secondary cause (Ishii et al., 2007; Archimandritis et al., 2001).

2. CASE PRESENTATION

Here we present a 61-year-old female complaining of pain in the abdomen for 2 months for which she came to the hospital, where the routine clinical examination was done when she was positive for HBsAg and USG of the abdominopelvic region was done which showed signs of ileocecal intussusceptions or appendicular lump.

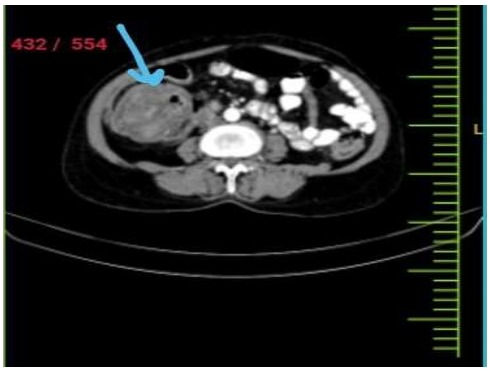

Figure 1 Ileocecal Intussusceptions.

The patient then underwent CECT abdomen, the reports then showed, there is e/o telescoping of the ileal loop into the caecum with a characteristic bowel within a bowel configuration, measuring approximately 8.6 X 7.6 X 6.8 ems (Figure 1). In the liver, it measures 15.3 cms, with an enlarged left lobe of the liver, normal in shape and enhancing the pattern. No evidence of EHBD & IHBD is noted. The portal vein is normal in size. The intra hepatic part of IVC & hepatic veins is normal. Gall bladder - Appears normal. Wall thickness is normal. No evidence of any calculus. Stomach -Is well defined, with no evidence of wall thickening. The fat planes between the stomach wall and the pancreas appear normal but with dilated bowel loop (Figure 2).

Figure 2 Shows Dilated bowel loops on CECT abdomen and pelvis.

The CECT of the thorax showed small sub pleural ground glass opacities noted in the posterior segment of the right upper lobe. Tiny nodules were noted in the lateral basal segment of the right lower lobe, fibrotic bands in the lateral segment of the right middle lobe, few tiny lucencies with imperceptible walls in bilateral upper lobes s/o emphysematous blebs Carina and Major bronchi are normal. Mediastinal vascular structures appear normal.

Surgical management

Then the patient was immediately planned for exploratory laparotomy for ileocecal intussusceptions. The steps of the operative procedure are, Under all aseptic precautions supine position is given to the patient, a lower midline incision is made from the umbilicus to pubic symphysis, the incision deepened in layers to reach the peritoneum, the peritoneum is then identified and opened on either side, bowel loops are then identified, the whole of the large and small bowel inspected for the lesion, a firm to hard consistency mass identified in the caecal region, appendix caecum and ascending colon could not be visualized separately, the mass was adherent to the surrounding tissues. The adhesions were relieved, the entire bowel was mobilized, and adhesions were

also freed along the white line of Todt. Bowel clamps placed at 20 cm from the caecum involving the zone of the ileum and other end clamped lateral to the duodenum jejunal plexuses involving proximal 1/3rd of the transverse mesocolon, the mesentery is first identified, divided and ligated. This is then followed by the division of the bowel. As the mass could not be reduced, it was found to be gangrenous, hence ejection of the gangrenous part was done and ileotransverse anastomosis.

A specimen was taken out and sent to the histopath for further investigation and confirmation. Hemostasis was achieved and confirmed, and milking of both proximal and distal loops was done. Cleaned cut bowel ends cleaned with betadine bowel anastomosis done. Anastomosis site confirmed bowel wash given, abdominal drain no 28 placed in SITU in the pelvis and fixed with silk 2-0 RB peritoneum and rectus closed using prolene over the loop. Resection of the intussusceptions was done and anastomosis was done. The surgical procedure was uneventful and the patient was transferred to the ICU (Figure 3 – 5). Later the patient was managed with IV fluids, antibiotics, and wound care.

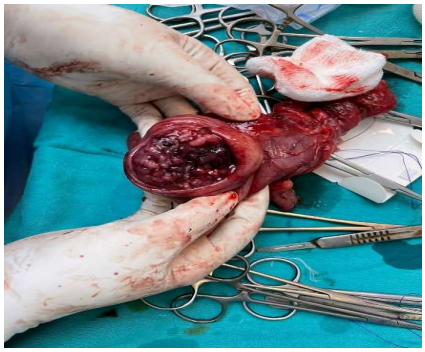

Figure 3 Removed part of bowel

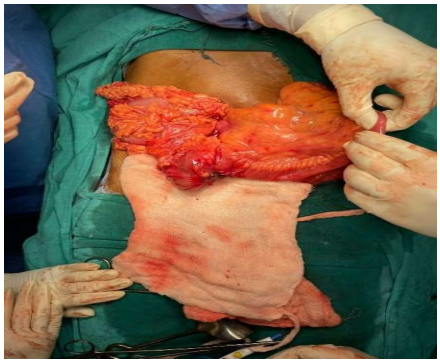

Figure 4 Intraoperative findings of obstructed bowel with a firm mass palpable

Figure 5 Observed obstruction in the loop of the bowel, Resected bowel containing caecum, ileum and one third of the transverse colon

Hospital timeline

The patient came to AVBRH causality with complaints of pain in the abdomen for 2 months. The patient was then evaluated clinically and all routine investigations were sent and were found to be HBsAg +ve. USG abdomen and pelvis were done and was s/o? ileocecal intussusception? appendicular lump. Rt tube insertion was done. The patient was planned for CECT abdomen and was s/o ileocecal intussusception and hepatomegaly. The patient was then planned for emergency exploratory laparotomy for ileocecal intussusception. Resection and anastomosis were done, procedure was uneventful and the post-op patient was then transferred to SICU for further management and was managed conservatively with fluids and antibiotics. On POD-4 patient was stable and was then shifted to the ward. On POD-6 check dress was done, the suture line was healthy and soakage was present at the distal end of the suture line and the patient was orally allowed for a soft diet. On POD-9 abdominal drain was removed. The procedure was uneventful. The daily dressing was continued and soakage was minimal and the suture line was healthy. On POD-13 alternate suture removal was done. CSR has been done on POD 19.

A tumor board discussion was done and was advised for MSI testing. If MSI testing is negative need for chemotherapy and if MSI testing is positive/testing is not done chemotherapy is to be given. The patient was counselled regarding MSI testing and the block was sent for testing at an outside laboratory. On 07/09/2022 patient was haemodynamically and vitally stable with a suture line healthy. The patient is being discharged with advice to follow up in medical oncology OPD with MSI testing report after 10 days for further management.

3. DISCUSSION

After the first reported case, a further study was carried out by john hunter in the year 1789. Chronic intussusceptions are present with frequent episodes of nonspecific abdominal pain for more than two weeks. The prime clinical feature of the intussusceptions is emaciation, weight loss and sometimes anorexia and vomiting. Some of the cases with the such presentation may be misdiagnosed as appendicitis (Choi et al., 2016; Rees and Lari, 1976).

The radiographic assessment is the first non-invasive diagnostic tool available as proved in earlier studies radiographs are neither sensitive nor specific for intussusceptions (Warshauer and Lee, 1999). USG is a more specific diagnostic tool with sensitivity and specificity at 98-100%, the CT reports show target or sausage-shaped lesion and the tools also specifies their location, nature and relationship with the surrounding structure (Bar-Ziv and Solomon, 1991; del-Pozo et al., 1999). Surgical resection is the more widely accepted management approach for the correction of intussusceptions in adults. The secondary effect could be a tumour which may metastasize or might compromise the blood flow (Ibrahim et al., 2010).

4. CONCLUSION

Careful plan of treatment goal and step by step medical and surgical management found to be effective in improving overall patient condition and improving quality of life after surgery. Post-surgery, careful patient observation and surgical intensive care unit medications help for further cessation of complication. Correct diagnosis, therefore, plays very important role in the formation of treatment plans in every patient.

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Author Contributions

Each author has contributed equally.

Informed consent

Written & Oral informed consent was obtained from the participants included in the study.

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Conflict of interest

The authors declare that there is no conflict of interests.

Data and materials availability

All data sets collected during this study are available upon reasonable request from the corresponding author.

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