

SIGMOID-RECTAL INTUSSUSCEPTION SECONDARY TO LARGE LIPOMA - A CASE REPORT

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ABSTRACT

Intussusception caused by a lipoma as a lead point is an unusual presentation in the paediatric population. In this case, a 16 year old boy with intussusception caused by a large lipoma underwent failed enema reduction in a district general hospital before subsequent referral to a specialist centre for surgical resection of the sigmoid colon containing the lipoma and primary anastomosis. This case highlights the need for guidelines for surveillance of lipoma and when is necessary to intervene when the lipoma causes an acute surgical emergency. Further investigation into defined size when complications of lipoma, such as intussusception, occur is necessary to prevent first presentation of lipoma with intussusception.

KEYWORDS: Colonic lipoma, intussusception, sigmoid colectomy, lead point.

INTRODUCTION

Intussusception occurs when a segment of the gastrointestinal tract invaginates into the lumen of another segment. Intussusception can be classified according to location: enteric, ileocolic, ileo-caecal and colonic.^[1] The most common type is enteric intussusception (49.5%) followed by colonic intussusception (19.9%).^[1]

If intussusception is not treated promptly, increased luminal pressure can lead to vascular compromise, bowel wall ischaemia and perforation.^[2]

Intussusception is more common in the paediatric population than in the adult population.^[1] Paediatric intussusception is usually idiopathic.^[3] Conversely, nearly 90% of cases of intussusception in adults have a pathological lead point.^[3] A lead point is a lesion or variation in the intestine that is trapped by peristalsis and dragged into a distal segment of the intestine, causing intussusception.^[3,4] examples of a lead point include a mass (benign or malignant), anatomical changes, or post-surgical adhesions, Meckel's diverticulum, polyp, tumour, hematoma or lipoma.^[3,4]

Lipoma is a common, non-epithelial, fatty tumour that can be found in the colon.^[5] Colonic lipomas are generally asymptomatic and are found incidentally during a colonoscopy or surgery for other conditions.^[5]

CASE REPORT

A 16 year old boy was referred by his GP to A&E in a district general hospital with bloody mucous discharge, abdominal pain presentation, with blood in his stools. Initial differentials included acute appendicitis and intussusception. Ultrasound demonstrated a left iliac fossa intussusception which appeared colo-rectal, and a CT was planned to further assess and to identify a possible lead point.

The CT abdomen and pelvis demonstrated a 24mm rectal submucosal lipoma with a 10cm sigmoid-rectal intussusception. There was low volume free fluid within the abdomen anterior to the intussusception (Figure 1)., nausea, vomiting and abdominal distention. He also reported one episode of red currant jelly stools. He had attended A&E 2 weeks prior to this.

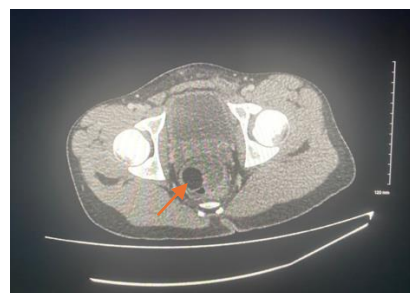


Figure 1: CT findings, showing the sigmoid lipoma as the lead point for the rectal-sigmoid intussusception.

A water soluble contrast enema was performed in an attempt to reduce the intussusception. The enema was unsuccessful and the patient was transferred to a tertiary referral hospital for a specialist opinion and surgical management.

The patient was consented for sigmoidoscopy +/- laparoscopy +/- laparotomy +/- sigmoid resection +/- stoma.

He underwent a laparoscopic-assisted sigmoid resection with a primary descending colon to rectal stapled anastomosis with no defunctioning ileostomy.

The operation was successful with an uncomplicated post operative course.

Post operative histology confirmed the lead point being a mature rectal lipoma, 32mm in maximal dimension. The overlying colonic mucosa was ulcerated and showed secondary changes including architectural distortion, oedema and haemorrhage. Further oedema and haemorrhage was also seen in the remaining bowel. There was no evidence of dysplasia or malignancy (figure 2).



Figure 2: Histological image of the sigmoid-rectal intussusception.

DISCUSSION

The majority of cases of childhood intussusception are idiopathic with no clear disease trigger of a pathological lead point.^[3] Intestinal lipoma is a rare benign tumour with an incidence of 0.2% to 4.4%, mainly seen in patients aged 50 to 70 years.^[6]

Intussusception caused by lipoma is rarely seen in the paediatric population.^[6] Colonic lipomas are generally small and asymptomatic, with symptoms correlating with the size of the lipoma.^[5] Lipomas larger than 4 cm become symptomatic in 75% of patients.^[5] The presenting symptoms are often vague, including abdominal distention and per-rectal bleeding but can lead to perforation or obstruction.^[5]

Colonic lipoma causing colo-colic intussusception is most frequently found in the transverse colon (28%),

follow by the sigmoid (29%).^[7] The average size of a lipoma causing intussusception is 59.81 x 47.84 x 38.90 mm, with the minimum size being 15 x 15 x 15 mm and the maximum size being 160 x 110 x 100 mm.^[7]

Lipomas that cause colo-colic intussusception are giant lipomas (>4cm) in the majority of cases (88%).^[7] In almost all cases, the lipoma is sub-mucosal or sub-serosal or within the muscularis propria.^[7] There are few guidelines available on surveillance of lipoma and when it is necessary to intervene or to resect a lipoma. Development of such guidelines would aid in avoiding first presentation of lipoma with intussusception, minimising life-threatening complications of intussusception including intestinal ischaemia or perforation.^[3]

CONCLUSION

Intussusception caused by a lipoma as a lead point is an unusual presentation in the paediatric population. In this case, a 16 year old boy with intussusception caused by a large lipoma was referred to a specialist centre for surgical resection of the sigmoid colon containing the lipoma and primary anastomosis.

This case highlights the need for guidelines for surveillance of lipoma and when is necessary to intervene when the lipoma causes an acute surgical emergency.

Grant

None.

CONFLICTS OF INTEREST

We the authors of this case report have no conflicts of interest to declare.

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