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# ACUTE APPENDICITIS IN INGUINAL HERNIA: REPORT OF TWO CASES

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## SUMMARY

**We report two cases of acute appendicitis in right incarcerated inguinal hernia (Amyand's hernia). One patient had gangrenous appendicitis that affected the adjoining caecum. A limited right hemicolectomy was done by extending the groin incision laterally and proximally. The second patient had simple appendicectomy. Posterior wall was repaired using nylon darn in both cases. Acute appendicitis should be considered in the differential diagnosis of obstructed right inguinal hernia.**

## INTRODUCTION

Acute appendicitis (AP) and inguinal hernia are common conditions in general surgical practice. Occurrence of AP in inguinal hernia sac (Amyand's hernia) is however rare(1- 3). This is a report of two cases of Amyand's hernia to emphasize the need for high index of suspicion of this rare condition that often present as intra-operative surprise.

## CASE REPORTS

*Case 1:* A 40-year-old male farmer with a long-standing right inguinoscrotal hernia was seen in the Accident and Emergency (A and E) unit with features suggestive of strangulation. He was resuscitated with intravenous fluid, urethral catheterisation, nasogastric tube and parenteral antibiotics.

Formal groin exploration under general anaesthesia revealed gangrenous appendicitis. The gangrene also affected the adjoining part of the caecum. Also included in the sac were part of the terminal ileum and ascending colon, both of which were viable. Dividing the external and internal oblique and transversus abdominis muscles extended the groin incision laterally and proximally. A limited right hemicolectomy with ileocolonic anastomosis was done. The posterior wall was repaired by nylon darn and the wound closed in layers. The patient developed superficial wound infection that was managed by local wound care. He was discharged home after 10 days of admission in satisfactory condition.

*Case 2:* A 30-year-old male farmer presented in the surgical outpatient clinic with right inguinoscrotal hernia of five years duration and features of recurrent incarceration one week before presentation.

Examination revealed a young man who had a huge right reducible, indirect, inguinoscrotal hernia with narrow neck. He was prepared and planned for surgery on the next operation list. The night before the operation, he developed severe abdominal pains; there was no vomiting and no distension. There was tenderness over the hernia and lower abdomen with exaggerated bowel sounds. He was managed conservatively with nil by mouth, intravenous fluids, analgesics, elevation of the foot of the bed and monitoring of vital signs. At surgery the next morning, under spinal anaesthesia, via a groin crease incision, the finding was a huge indirect inguinoscrotal hernia sac containing cloudy haemorrhagic fluid, viable loops of a small bowel and grossly inflamed appendix. Appendicectomy was done and the caecum easily reduced. Repair of the hernia was done with darning of the posterior wall using nylon 1. Postoperative course was uneventful. Histology confirmed acute appendicitis with lymphoid hyperplasia.

## DISCUSSION

Acute appendicitis and obstructed external hernia are the leading cause of acute abdomen in our environment(4). In tropical Africa, patients often carry their hernia for a long time until they are forced to present to the hospital when complication such as incarceration, obstruction or strangulation occurs. In addition, poverty, ignorance and difficulties with transportation from remote rural areas may lead to further delay in presentation with consequent increase in morbidity and mortality. It is not uncommon to find the appendix in a right inguinal hernia sac in cases of sliding hernia(2,5). However, occurrence of acute appendicitis in inguinal hernia is rare with a reported incidence of 0.13%(3). Paediatric patients and the elderly are the age group most commonly affected(5,7). Our patients were young adult farmers from remote rural areas. While spontaneous inflammation of the appendix cannot be ruled out, we agree with others that strangulation of the appendix from recurrent incarceration of the inguinal hernia may be an important factor in Amyand's hernia(2,5,7). Pain in a hernia swelling is

usually attributed to complication of the hernia itself, so that preoperative diagnosis is difficult(8). Clinical presentation depends on periappendicular inflammation and the presence or absence of peritonitis(3).

Appendicectomy followed by repair of the hernia can usually be achieved through the groin incision with care not to contaminate the peritoneal cavity. Where there is peritonitis, a laparotomy is advisable(9). In one of our patients, a limited right hemicolectomy was done by extending the groin incision laterally and upward. A high index of suspicion that considers acute appendicitis in the differential diagnosis of complicated inguinal hernia is necessary so as to minimise morbidity and mortality.

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