CASE REPORT:

UNEXPECTED CONTENTS OF GROIN HERNIA SAC IN A 4-WEEK-OLD INFANT.

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ABSTRACT

Hernia is the protrusion of a viscous in part of whole through the wall of its containing cavity and the repair of an inguinal hernia in children is a very common operation in surgical practice.

In majority of cases, bowel or omentum is the content of hernia sac but in some cases unusual contents can be found intraoperatively like ovary, fallopian tube, testis, urinary bladder, colonic diverticula, Meckel's diverticulum or very rarely vermiform appendix.

Surgeons may encounter challenges when faced with an unexpected intraoperative finding in the form of uncommon contents of the hernia sac.

Here, we report a case of combination of a testis and an inflamed vermiform appendix (Amyand's Hernia) in a 4-week-old male infant discovered in the hernia sac incidentally during surgery for right sided inguinal hernia in the department of pediatric surgery in the University of Benin Teaching Hospital, Benin City, Nigeria in which we did appendectomy, herniotomy with high ligation of the hernia sac and Orchidopexy.

This case is reported to draw clinicians' attention to this unexpected groin hernia sac contents during the repair of inguinal hernia, which were a rare combination of testis and an inflamed vermiform appendix.

KEYWORDS: Unexpected, Hernia Sac, Contents

INTRODUCTION

Indirect hernia is the presence of a protruding peritoneal sac (patent processus vaginalis) at the deep inguinal ring[1-3].

In majority of cases, bowel or omentum is the content of hernia sac but in some cases unusual contents can be found intraoperatively like ovary, fallopian tube, testis, urinary bladder, colonic diverticula, Meckel's diverticulum or very rarely vermiform appendix[1-4,6].

Undescended testis occurs in 3% of term infants males but majority will descend within the first 9 to 12 months and anomalies associated with undescended testis includes patent processus vaginalis, inguinal hernia[2].

The presence of an appendix inside the sac of inguinal hernia whether inflamed or not, is referred to as Amyand's hernia[1,7-10] and its diagnosis is usually an incidental finding during surgery[5]. It is very rare, occurring in less than 1% of patients of inguinal hernia surgery in childhood[1,7,8]. Apendectomy depends on its inflammatory state[1].

This case is reported to draw clinicians' attention to this unexpected groin hernia sac content during the repair of inguinal hernia.

CASE

O.M, A 4-week-old male child presented to our children emergency department with 1day history of right groin swelling and intermittent inconsolable cries. The swelling was said to be recurrent until a day prior to presentation when it became irreducible. No vomiting, fever, change in bowel habit or abdominal distension.

The patient was full-term and born by spontaneous vaginaldelivery.No history of trauma to the right groin.
Parents sought help and advice from non-health care givers but without improvement.

The patient was healthy looking,well fedand active on presentation. Vital signs were stable and within normal limits. The abdomen was full, soft, non-tender with normoactive bowel sound. There was a swelling in the right groin extending into the ipsilateral hemiscrotum, firm, non-tender, no differential warmth, irreducible (Fig. 1). The right testis was felt high up in the right hemiscrotum. The left testis and hemiscrotum were grossly normal.

Fig. 1: Irreducible right Inguinoscrotal hernia.

Soft tissue Ultrasonography of the right groin swelling showed a loop of herniated aperistaltic bowel and an undescended testis on the right suggestive of Right inguinoscrotal hernia. Packed cell volume was 35%, other blood parameters and chemistry were within normal ranges. He was worked up for and right groin exploration done under general anaesthesia on account of irreducible right inguinoscrotal hernia.

At operation, a transverse right groin crease incision was made andthe hernia sac was identified. Upon opening the sac, an appendix that was inflamed and a testis was found (Fig.2). An appendectomy was done and caecum reduced to the abdominal cavity, the hernia sac was dissected off the spermatic cord structures and transfixing with high ligation of the sac was done. The testis was fixed in a subdartos pouch and the wound closed.

Fig. 2: Inflamed Vermiform Appendix and Testis as contents of the hernia sac

Post-operative course was uneventful following intravenous fluids, prophylactic antibiotics and adequate analgesia. Oral feed was commenced when bowel activity returned and was discharged to outpatient follow up.

Within one week of follow up, wound healing was satisfactory and he has been in good general condition.

DISCUSSION

The age of patient with Amyand's hernia has been reported in the range from 3 weeks to 92 years[1,5] as seen in this index patient. Most cases of Amyand's hernia occurs on the right side and commonly occurs on males[1,10] just like in our patient.

A fibrous band connecting the tip of the appendix to the right testis is believed to guide the appendix through the inguinal canal in the presence of a patent processus vaginalis[1,6-8]. This accounted for the combination of appendix and testis as contents of the groin hernia sac discovered in our patient.

Many authors[1,5,7,8] believed that there is an association between incanceration of the appendix in the inguinal canal and its inflammation as noticed in this index case.

Preoperative sonographic findings are operator dependent and remains an unreliable modality[1,5], just as it was not helpful to us for this patient. Authors[9,10] encourage appendectomy in cases of appendicitis which we did for this patient as well as herniotomy and orchidopexy as in similar case report[1,2].

A combination of Amyand's hernia and testis as hernia sac contents was successfully managed in this patient. This case is reported to draw clinicians' attention to this unexpected groin hernia sac content during the repair of inguinal hernia as awareness of such surprises is essential to the surgeons who do inguinal operations in the paediatric age group.

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