



A CASE OF AMYAND'S HERNIA IN A FOUR WEEK OLD MALE

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INTRODUCTION

Hernia is labeled as organ protuberance or its fascia across the wall of a containing cavity (Ivaschuk et al., 2014). Amyand's hernia is a type of inguinal hernia, where the appendix is trapped within the hernial sac. Preoperative diagnosis can be challenging, accounting for only 1% of all inguinal hernias and in most cases, is just an incidental intraoperative finding (Barut & Tarhan, 2008).

CASE SUMMARY

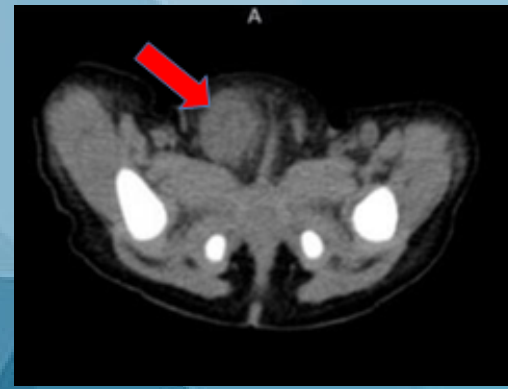
This is a case of a 4-week-old male brought due to a one-day history of right scrotal swelling, accompanied by fever. He had no vomiting, loose stools nor abdominal enlargement. Birth and maternal history were unremarkable. On physical examination, he was alert, active, slightly irritable, not in cardiorespiratory distress, and was febrile at 38.7°C. Other vital signs were within normal limits. Pertinent physical examination findings showed the male genitalia as erythematous inguinoscrotal bulge, measuring about 3.5 x 2 cm, extending from the right scrotum up to the right inguinal area, nonreducible, tender on palpation, and tested positive on transillumination test. His abdomen was slightly distended, with normoactive bowel sounds, soft and nontender.

Given the said findings, initial impression was Incarcerated Indirect Inguinal Hernia, Right; Umbilical Hernia. Diagnostics requested include complete blood count and Chest x-ray which were both unremarkable. Abdominal X-ray showed findings of distal/low bowel obstruction. Sonographic evaluation of the whole abdomen and inguinoscrotal area revealed Complicated hydrocele, right; Inguinoscrotal hernia, right, t/c Epididymitis, right, and Retractable Testis, left. Since the ultrasound result was not definite, CT scan of the whole abdomen and pelvis with IV contrast was requested which confirmed an incarcerated inguinal hernia.

A surgical exploration was performed through an inguinal approach. Intraoperatively, identification and inspection of the hernial sac revealed an incarcerated gangrenous appendix. Hence, appendectomy and herniotomy were carried out. The patient tolerated the procedure and was discharged with no complications after 3 days. In this patient, histopathology showed Acute Necrotizing Appendicitis, ruptured; along with a fibrocollagenous to fibrovascular tissue with vascular congestions consistent with a hernial sac.



Right inguino-scrotal bulge and umbilical hernia on admission



incarcerated inguinal hernia on CT scan

DISCUSSION

Percentage of significant morbidity and mortality from Amyand's hernia ranged from 5.5 to 30% and was concomitant with sepsis secondary to peritoneal spread (Sharma et. al, 2007). They associated the lower mortality rate with timely appropriate management as well as good post-operative care. Physiologic events that cause an increase in intra-abdominal pressure may cause compression of the appendix leading to vascular compromise, further inflammation and bacterial overgrowth.

Similar to this case, physical examination will reveal tenderness and swelling in the inguinoscrotal area and is associated with a bulging mass in the same region. Other signs and symptoms include right lower quadrant pain, anorexia and vomiting.

Blood work up will reveal leukocytosis which is congruent with bacterial overgrowth and inflammation. To attain a correct preoperative diagnosis and detect complications, ultrasound (US) and computed tomography (CT) are done. Sonographic imaging shows a blind-ended, dilated tubular structure extending into the inguinal canal, non-compressible is notably tender upon compression with the probe. The sonogram findings prompted an abdominal CT scan to be done. Official reading of the Computed Tomography done with our patient was congruent with the findings Amyand's hernia. Hence, the subsequent surgical procedure.

CONCLUSION

Amyand's hernia is a rare type of inguinal hernia whose preoperative diagnosis presents a challenge to any physician. Useful imaging modalities include Ultrasound and Computed Tomography. In pediatric patients, treatment involves appendectomy through the herniotomy incision accompanied with meticulous hernia repair. To avoid higher chances of complications, the physician should practice timely recognition with appropriate surgical intervention and good post-operative care.

REFERENCES

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