



Introduction

Cryptorchidism is one of the most common congenital abnormalities in full-term males. It is associated with infertility and increased risk of testicular cancer. (1) More specifically, an undescended testicle increases the risk to develop testicular cancer by 2 to 8 times. (1) The current standard of care is to refer newborn males with an undescended testicle to a urologist by six months of age for orchiopexy (2). Our case is unique in that cryptorchidism was discovered incidentally during inguinal hernia repair complicated by small bowel obstruction in a 65-year-old male.

Case Description

We present a case of a 65-year-old male, with no significant past medical history, who presented to the emergency department with right groin pain. Patient reported that he had a chronic reducible right inguinal hernia. On physical exam, the patient had bilateral inguinal hernias. The right sided inguinal hernia was large, tender to palpation and incarcerated. The left sided inguinal hernia was small and reducible. It was also noted that only the left testicle was present in the scrotum. Upon questioning, the patient reported that he had been born with only one testicle and he was unsure if he had any intervention as a child. CT scan of the abdomen revealed a distal small bowel obstruction with transition located in the right inguinal hernia. Given the physical exam and CT findings, the patient was urgently taken to the operating room for a right inguinal hernia repair. In the operating room, an open repair was performed. The procedure was performed in the usual fashion but no cord structures were found to isolate. The hernia sac was identified, dissected free from the internal ring and was opened to identify the contents. Within the hernia sac, viable small bowel and an atrophied right testicle were found. The bowel was subsequently reduced as no compromise was noted. Decision was then made to perform an orchiectomy. Suture ligation of the vas deferens and vasculature was performed and the testicle was subsequently removed. Suture ligation of the hernia sac was performed and hernia repair was completed with polypropylene mesh. Patient tolerated procedure well and was discharged on post-operative day 1. Pathology of the specimen confirmed an atrophied testicle with no signs of malignancy.



Figure 1: Coronal view of CT Abdomen and Pelvis



Figure 2:
Axial view of
CT Abdomen
and Pelvis



Figure 3:
Sagittal view
of CT
Abdomen and
Pelvis

Discussion

Cryptorchidism is a common congenital abnormality that is typically seen in young males and is rare to present later in life. Most cases of undescended testis are identified early in life and are surgically corrected with orchiopexy. This rare finding of cryptorchidism during urgent surgery is one that general surgeons should be prepared to handle should the circumstance arise. The undescended testicle may have been a contributing factor for development inguinal hernia incarceration (3) Pre-operatively the CT imaging showed a soft tissue irregularity at the site of transition (as indicated by the arrow in Figure 1 and Figure 2). This finding was consistent with the intraoperative findings of the testicle being adherent to the medial portion of the hernia sac. Given the patients history of an absent testicle and these findings on CT imaging, suspicion was high for the undescended testicle to be present in the hernia. In reference to orchiopexy, there is a 2 to 6 times increased risk of developing cancer if orchiopexy is performed in post pubescent males as compared to before puberty (4). Postpubertal orchiopexy does not improve fertility or hormone production. (5). Due to these factors, orchiectomy was performed in our patient instead of orchiopexy along with inguinal hernia repair. Discussion should be had with patients that present with similar findings to include orchiectomy in the procedure to be performed. There are few reports of elderly males with an undescended testicle causing an incarcerated hernia and small bowel obstruction, both of which our patient had. The few reports that do exist advocate for inguinal incision and hernia repair with removal of the testicle (7,8).

Conclusion

The standard of care for cryptorchidism is correction with orchiopexy at a young age. Incidental findings of cryptorchidism during a surgical procedure should be managed with orchiectomy due to malignancy risk in adult males. Although this case is rare, general surgeons should be aware of how to manage cryptorchidism when incidentally found during inguinal hernia repair.

References

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