

Abdominoscrotal Hydrocele in an Adult: A Rare Case Report

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Introduction

Abdominoscrotal hydrocele (ASH), or hydrocele en bisac, is an uncommon entity in adult males. It extends from the inguinoscrotal region, through the isthmus, entering into the abdominal cavity where it may lie retroperitoneally or intraperitoneally.

Case report

- We present a 20-year-old male with a progressively enlarging abdominal mass extending to the left groin area for the past six months, with no history of change in bowel habits or voiding symptoms.
- Examination revealed a transilluminated, non-tender, soft, and ill-circumscribed swelling. The cross-fluctuation test was positive on bimanual examination, and bilateral testes were at normal position. Ultrasonography showed a well-defined, turbid, fluid-filled cystic lesion measuring 15 x 10 cm.
- A contrast-enhanced CT scan demonstrated an 11 x 9 x 12 cm cystic structure containing gross fluid.
- A laparoscopic view from the left midclavicular port revealed the extent of the umbilicus. A J-shaped incision was made over the left groin, and then both the sac and the spermatic cord were dissected and separated from the underlying space.
- Approximately 400 mL of fluid was aspirated. The excess sac was excised, followed by the eversion of the remaining sac. The inguinal canal was closed in layers, and a corrugated drain was placed for postoperative drainage.

Discussion

- ASH is a rare variant of hydrocele, first described by Dupuytren in 1834 [1].
- It is characterized by a dumbbell-shaped fluid-filled sac extending from the scrotum into the abdominal cavity via the inguinal canal.
- While more commonly reported in children, ASH can occasionally occur in adults, where diagnosis may be delayed due to its rarity and insidious progression [2].
- The pathogenesis remains debated, with the most accepted theory involving a one-way valve at the internal inguinal ring, allowing fluid to accumulate abdominally without reflux [3].
- Clinically, ASH presents as a soft, transilluminant inguinoscrotal mass with abdominal extension. Ultrasound is typically the first step, with CT or MRI used to assess the extent and exclude differential diagnoses like hernias or cystic tumors [4].
- Surgical excision is the definitive treatment, especially in adults. Minimally invasive approaches, such as laparoscopy, offer excellent visualization, while open or combined techniques are valuable in large or complex cases [5].
- In this case, a hybrid approach enabled complete excision with favorable recovery. Prompt diagnosis and intervention are critical to prevent complications such as compression of adjacent structures, testicular atrophy, or infertility.

Conclusion

This case highlights the importance of linking medical history, clinical findings, and imaging for accurate diagnosis, expanding our understanding of hydrocele variations and their inclusion in the differential diagnosis of abdominal or groin swellings.

References

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Fig.1: Dissected hydrocele sac with spermatic chord



Fig.2: CECT showing hourglass-shaped ASH.