Answers to Medical Quiz

- A1. Large right-side scrotal swelling.
- A2. Right hydrocele and right inguinal hernia.
- A3. Surgical intervention.

DISCUSSION

Hydrocele is defined as the collection of fluid within the processus vaginalis that produces swelling in the inguinal region or scrotum. In the male neonate patient, the fluid around the testicle is communicating with the peritoneal cavity!

The pathophysiology of hydrocele is based on the obliteration of the processus vaginalis after the descent of the testicles in the neonate. Few theories explain the failure of this obliteration, one of these theories is the number of processus vaginalis smooth muscles which are not enough to close the wall of processus vaginalis^{1,2}.

The clinical presentation of hydrocele is usually asymptomatic (painless) scrotal swelling, and most of the cases of hydrocele develop after birth².

There are two types of hydroceles: communicating hydrocele and non-communicating hydrocele. The majority of communicating hydrocele usually present after birth, while non-communicating hydrocele may present after few years^{2,3}.

The diagnosis of hydrocele is based mainly on history and physical examination; in rare instances, ultrasound could help diagnosis in equivocal cases⁴.

Most of the cases of hydrocele would resolve spontaneously after few months. Surgical ligation of patent processus vaginalis is rarely indicated in non-resolved hydrocele and usually performed at age of two years with excellent outcome^{4,5}.

CONCLUSION

Hydrocele in children is a very common condition in males. Most cases present with painless scrotal swelling. The natural history of hydrocele in children is resolution with time. Surgical intervention is rarely indicated in non-resolved hydrocele.

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REFERENCES

- Naji H, Ingolfsson I, Isacson D, et al. Decision Making in the Management of Hydroceles in Infants and Children. Eur J Pediatr 2012: 171(5):807-10.
- Koski ME, Makari JH, Adams MC, et al. Infant Communicating Hydroceles--Do They Need Immediate Repair or Might Some Clinically Resolve? J Pediatr Surg 2010; 45(3):590-3.
- Hall NJ, Ron O, Eaton S, et al. Surgery for Hydrocele in Children-An Avoidable Excess? J Pediatr Surg 2011; 46(12):2401-5.
- 4. Wilson JM, Aaronson DS, Schrader R, et al. Hydrocele in the Pediatric Patient: Inguinal or Scrotal Approach? J Urol 2008; 180(4 Suppl):1724-7; discussion 1727-8.
- Osifo OD, Osaigbovo EO. Congenital Hydrocele: Prevalence and Outcome among Male Children Who Underwent Neonatal Circumcision in Benin City, Nigeria. J Pediatr Urol 2008; 4(3):178-82.