



Macroscopic hematuria in a child after a saddle trauma.

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History

A young boy, age 10, presents at the emergency department with gross hematuria since a few days.

According to the mother, the child underwent a scrotal trauma on the saddle of his bike as he fell a few days ago.

The boy is otherwise healty, with no other contributing history.

Initial examination

No relevant factors on physical evaluation

Investigations

- •Blood work up: non inflammatory, nl creatinine
- Urine sediment: Macroscopic hematuria
- Urine culture: sterile
- •<u>Abdominal ultrasound</u>: Poorly contributing, as the child has a poorly filled bladder. A thickened bladder wall is suspected, with eventually blood clots in the bladder.
- <u>Abdominal CT with IVP</u>: A splenomegaly is described, with normal kidneys and and thick bladder wall with porbably intraluminal blood clots. Although not described, a contrast capting massa on the right bladder wall is also suspected.
- A cystoscopy under general anesthesia is then performed: The bladder is filled with necrotic material and polipoids massa.

Cold biopsies and limited TUR resection are performed.

- <u>Pathology</u> reports shows necrotic material and massive presence of eosinophils
- A full thickness bladder biopsy is then under general performed.
- Pathology reports:
 - No signs of a rhabdomyosarcoma: the desmine and myogenine colorations show no tumor cells.
 - The desmine coloration shows presence of detrusor cells.
 - The CD 68 and CD 31 colorations shows groups of macrophages. (groups of granulomas)
 - The other colorations show reactive inflammatory reaction.
 - In conclusion massive inflammatory reaction with granulomas and eosinophils. No sign of tumoral process in the sample.

Take home message

Always investigate macrospcopic hematuria in children, just as well in adults. The most common cause will most of the time be benign (bulbar urethritis, stones, nutcracker syndrome), but sometimes, you find...this.











