The Acute Scrotum in Childhood and Adolescence

by Dr. med. Patrick Günther, Dr. med. Iris Rübben in volume 25/2012

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Pain May Present in Variable Ways

The statement that the acute scrotum is always characterized by scrotal pain applies only to a degree. Unfortunately the authors did not mention that scrotal pain by no means dominates the initial consultation for testicular torsion since many patients report pain in the inguinal region/lower abdomen and not the scrotum. If the genitals are not examined lower abdominal pain may be misinterpreted as appendicitis or gastroenteritis, and watchful waiting therefore be practiced, with the result that the testicle will be lost.

In 13 of 37 cases of unrecognized testicular torsion, the genitals were not examined. Torsion leads to scrotal edema, which was misinterpreted as epididymitis in 12 of the 37 cases. This results in the risk of misdiagnosis.

The mention of color Doppler sonography to prevent such misdiagnosis is helpful only to a degree. In the emergency setting, the initial contact with a doctor may be with a doctor in further training who does not have the experience to perform color Doppler sonography. Many hospitals do not have a urology department and initial treatment is provided by doctors from other specialties, who do not know how to perform color Doppler sonography of the scrotum. This is also the case for emergency outpatients, who are seen by doctors from all specialties. Only few of the 37 patients were seen by a urologist or pediatric surgeon on initial presentation.

In cases of undefined pain in the inguinal region/lower abdomen, testicular torsion should be considered and the genitals should be investigated. Older age does not exclude testicular torsion; three of the 37 patients were older than 40. Prior orchidopexy does not exclude torsion and should not lead to a false sense of security.

REFERENCES


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Testicular Torsion Masked by Painful Abdomen

We would like to add a few comments to the excellent review article by Günther and Rübben. In our opinion it seems worth mentioning that testicular torsion may be masked by a painful abdomen. We review 10 patients with testicular torsion who presented with abdominal pain as their leading symptom. For this reason we recommend mandatory genital examination in the clinical assessment of boys with abdominal pain. Particular attention should go to boys with reduced sensitivity of the lower half of the body—for example, in patients with meningomyelocele.

When operating a patient with an incarcerated inguinal hernia we advise to visualize the ipsilateral testis since an incarceration can substantially compromise testis perfusion.

Testicular trauma is not only an important differential diagnosis in acute scrotum but in itself presents a risk factor for testicular torsion (e21 in the article).

The literature encompasses some 50 cases of ipsilateral testicular torsion after orchidopexy (1). Thus we suggest the modified technique for testicular fixation reported by Gesino and Bachmann de Santos (2).

A full blood count, C-reactive protein concentration, and the analysis of urine sediment are listed as components of the diagnostic approach. With the exception of leukemia, which hardly ever needs to be considered, none of the differential diagnoses has a definitive laboratory constellation. Studies investigating predictive variables in acute pediatric scrotum mostly do not even consider laboratory variables from the outset (for example, e21 and 3). Furthermore, ascertaining the above-mentioned parameters may delay the definitive diagnosis. The decisive issue is timely presentation in institutions that can perform the required surgical measures immediately. For this reason we think that the diagnostic evaluation listed above can be dispensed when assessing a boy for testicular torsion.

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