FEATURES OF THE CLINICAL PICTURE OF TESTICULAR TORSION AND ITS APPENDIX IN CHILDREN

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Abstract The relevance of the problem of emergency urological pathology in children is determined by the need for early detection and timely surgical intervention in case of threat of ischemic necrosis of the testicle. Testicular torsion and hydatids Morgagni are among the most common causes of "acute scrotal syndrome" in children. This article is based on the results and clinical findings of previous author's studies, which included a thorough comparative analysis of 142 cases of acute scrotal pathology in children. The emphasis is on the practical value of such signs as the absence of the cremasteric reflex, Prehn's symptom , "dark spot" and the dynamics of pain syndrome. The evolution of diagnostic approaches and tactical decisions, based on many years of clinical experience in a specialized hospital, is emphasized.

Key words: testicular torsion , hydatid Morgagni , children, diagnostics, acute scrotum , clinical practice, author's experience.

Introduction Acute diseases of the scrotum organs in children are an urgent urological pathology that requires high clinical alertness and an accurate algorithm of actions. In the context of increasing reproductive system morbidity in pediatrics, timely diagnosis of testicular torsion is of exceptional importance. According to various researchers, including the author's own observations, up to 35% of all urgent surgeries in boys are due to testicular torsion . Differential diagnosis with orchiepididymitis , injuries and inguinal hernias is often difficult due to overlapping symptoms.

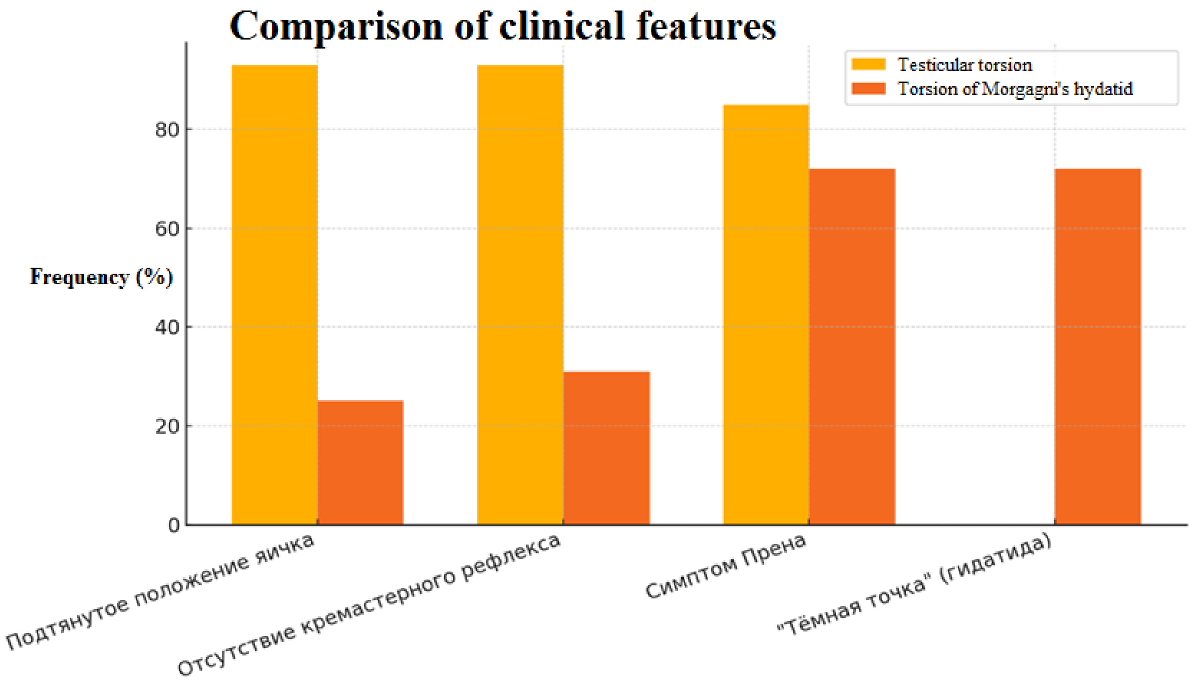
In previously published works we described the main criteria that increase the accuracy of diagnosis: acute onset of pain, retracted position of the testicle, absence of cremasteric reflex and positive Prehn's sign . The present work is aimed at an expanded study and confirmation of these signs taking into account new clinical data.

Materials and methods . A prospective and retrospective study of clinical cases of children with acute scrotal diseases hospitalized in the Samarkand branch of the Russian Scientific Center for Emergency Medicine in 2019–2023 was conducted. The sample included 142 patients aged 6 months to 14 years. Diagnostics included:

clinical examination and palpation tests (including Prehn's sign , cremasteric reflex); laboratory tests (leukocytosis, ESR, C-reactive protein); instrumental diagnostics (ultrasound with color Doppler, if necessary - diaphanoscopy); pain syndrome assessment according to VAS. All patients received a final diagnosis based on intraoperative findings. Statistical analysis was performed using the SPSS 22.0 software package.

Results . The most common form of emergency pathology was testicular torsion (41 cases, 28.9%). Most patients (93%) had clinically revealed: a marked increase in the density of the testicle, its high position and the disappearance of the cremasteric reflex. In 78% - sharp unilateral pain. Prehn's symptom was positive in 85% of patients with torsion . Torsion hydatids Morgagni's sign (29 cases, 20.4%) was more common in boys over 10 years of age and was manifested by moderate pain syndrome, localized edema, and the "dark spot" symptom (detected in 72% of cases during examination in the first 48 hours). Orchyoepididymitis was diagnosed in 15.5% of cases , scrotal injuries accounted for 12.7%, and strangulated inguinal hernias accounted for 14.8%. The average time to seek medical attention for testicular torsion was 14.2 hours, and for hydatid , 31.6 hours. Delayed admission correlated with the need for orchiectomy (in 42.5% of cases, when admitted after 24 hours).

The chart below shows comparative data on symptom frequencies:



Discussion c comparison of the obtained data with the results of our own and foreign studies confirms the diagnostic significance of such signs as the absence of the cremasteric reflex, Pren's symptom , sharp pain and asymmetry of the scrotum. Early ultrasound diagnostics with Doppler increases the accuracy to 92% in testicular torsion . The data of our own material demonstrate a decrease in the proportion of orchiectomies to 19% due to early treatment and awareness of parents. The introduction of TWIST Score as a primary assessment algorithm is justified for the conditions of the emergency room.

Conclusion

The obtained data strengthen the position of previously published findings and expand the evidence base for the diagnosis of testicular torsion and hydatid. Morgagni in children. The use of an improved clinical protocol based on the author's many years of experience allows achieving more favorable results. The need for training pediatric specialists in andrological diagnostics is emphasized. Based on the accumulated material, proposals for standardizing emergency care for scrotal pathology in children are formed.

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