

## PERINATAL TESTICULAR TORSION

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Perinatal testicular torsion (PTT) is the term used for testicular torsion that occurs during pregnancy, birth, or within the first 30 days of life. Its incidence is 6.1 per 100,000 live births, which is rare and accounts for 10-12% of all pediatric testicular torsion cases. Antenatal testicular torsions account for 70-80% of PTT and occur in the uterus, while the remaining torsions occur postpartum and soon after birth. PTT is usually extravaginal and painless, while pediatric torsion is intravaginal and painful(1-5).

In a series of 28 patients, scrotal swelling and scrotal discoloration were observed in 71%, hydrocele 25%, contralateral hydrocele 7% in all PTT patients, while irritability was observed in only one infant. It is mostly localized to the left side(1).

Due to its painless nature, the diagnosis of PTT may be missed in clinical examination. When PTT is defined, its management is controversial and observation ranges from delayed contralateral orchiopexy and empirical contralateral orchiopexy to emergency orchiectomy. Especially in bilateral cases, early recognition of the acute onset of postpartum is very important to prevent anorchia. A hard, enlarged testicle with hardening and discoloration of the scrotum is considered prenatal testicular torsion. New onset testicular enlargement and tenderness and scrotal swelling are diagnosed as postnatal testicular torsion(1-5).

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nancy, induced labor and surgical intervention are recommended to absolutely preserve at least one of the testicles. On the other hand, there are cases of “silent” atrophic testes (nubbins) with normal scrotum, diagnosed or undiagnosed PTT at birth and there is no place for emergency surgical treatment (1,2,3,6,10).

During primary surgical exploration, a total of 62 patients with PTT, including 2 (3.2%) patients with bilateral asynchronous PTT, were born at term (>37 weeks of gestation) and 8% preterm. Of these patients, 53% were delivered vaginally, 34% by emergency (16%) or planned (18%) cesarean section. Abnormal testicular examination was also detected in 69% of these patients(9).

Early detection of PTT, early use of Doppler US, and a shorter decision-making process achieved with early involvement of pediatric surgery/urology may affect prognosis, especially in the postpartum PTT setting(9). Nandi et al. found a 9% salvage rate for cases investigated within 72 hours of admission (13).

Considering that 3% asynchronous bilateral PTT rates have been reported in the literature, early consultation and ultrasonography are recommended for early diagnosis in suspected cases. Frequent follow-up or orchiopexy should be performed to protect the contralateral testis, if necessary, in order to avoid anorchic situation in the future.

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