PERINATAL TESITIS TORSIYONU: VAKA SUNUMU

Perinatal Testicular Torsion: A Case Report

Dilek SARICI¹, Mustafa Ali AKIN¹, Selim KURTOĞLU¹, Ali YIKILMAZ², Ghaniya DAAR EDE³, Serdar Ümit SARICI⁴

ÖZET

Perinatal testis torsiyonu, yaşamın ilk 30 gününde veya intrauterin dönemde oluşan nadiren görülen bir klinik durumdur. Perinatal testis torsiyonunun sonucunun olumlu olması için uygun, hızlı değerlendirme ile doğru tedavi planlamasının yapılması gereklidir. Biz, ağlayan ve huzursuz yenidoğan ayırıcı tanısında göz önünde bulundurulması gereken oldukça nadir görülen bir perinatal torsiyon vakasını sunuyoruz.

Anahtar kelimeler: Perinatal, Tedavi, Testiküler torsiyon

ABSTRACT

Perinatal testis torsion is a rarely seen clinical entity occurring during the intrauterine period in the first 30 days of life. Urgent evaluation, prompt consultation if necessary and proper treatment arrangements are necessary for a good outcome in the case of perinatal testis torsion. We reported a very rare case of perinatal testicular torsion as it should be considered in the differential diagnosis of crying and restless newborns.

Keywords: Perinatal, Testicular torsion, Treatment

¹Erciyes Üniversitesi Tip Fakültesi Çocuk hastalıkları Anabilim Dalı,Yenidoğan Ünitesi Kayseri

²Erciyes Üniversitesi Tıp Fakültesi Radyoloji Anabilim Dalı, Kayseri

³Bozok Üniversitesi Tıp Fakültesi Çocuk hastalıkları Anabilim Dalı, Yozgat

⁴Ufuk Üniversitesi Tıp Fakültesi Çocuk hastalıkları Anabilim Dalı,Yenidoğan Ünitesi, Ankara

Dilek SARICI, Doç. Dr Mustafa Ali AKIN, Doç. Dr Selim KURTOĞLU, Prof. Dr Ali YIKILMAZ, Uzman Ghaniya DAAR EDE, Yrd. Doç. Dr. Serdar Ümit SARICI, Prof. Dr

İletişim:

Yrd. Doç. Dr. Ghaniya DAAR EDE Bozok Üniversitesi Tip Fakültesi Çocuk hastalıkları Anabilim Dalı, Adnan Menderes Bulvarı No.44 Yozgat Tel: 0090 507 7881018 e-mail: ghaniyadaar@gmail.com

Geliş tarihi/Received: 20.02.2014 Kabul tarihiAccepted: 08.01.2015

Bozok Tip Derg 2015;5(2):90-2 Bozok Med J 2015;5(2):90-2

90

INTRODUCTION

Perinatal testis torsion is a rarely seen clinical entity occurring in the intrauterine period in the first 30 days of life (1). It equals to 12% of all testicular torsions (2). The victims mostly suffer from unilateral torsion. However it can affect both testes in 11-22% of all cases (3). Approximately 70% of the patients are diagnosed at birth, and the diagnosis is put on postnatally in the rest (4). We herein reported a very rare case of perinatal testicular torsion as it should be considered in the differential diagnosis of crying and restless newborns.

CASE REPORT

A three-day-old baby was admitted to our outpatient department of neonatology unit with the complaints of restlessness and crying. He had a painful, solid purplish color mass in the left testicle (Figure 1).



Figure 1. Gross appearence of left testicular torsion in the newborn

He had been born preterm on 29th-week, 1390 grams through normal vaginal route to a first pregnancy of the 25-year old mother. On physical examination, left testicle was hard, painful on palpation and larger than the other testicle, there was purple color change. Scrotal ultrasonography did not reveal any heterogenous mass or blood supply in left scrotum (Figure 2). The pediatric surgery consultation offered medical followup before elective surgery. During follow-up, Doppler ultrasonography showed that left testicle appearance was more heterogenous and more hypoechoic with enlargement in size compared to the right testicle. Following a medical treatment, pain and color changes in left testicle decreased. He was followed under the supervision of pediatric surgery and neonatology.



Figure 2. The sonographic findings of the neonate showing extra-vaginal torsion in testes.

DISCUSSION

Birth via a vaginal route, prolonged labour process, twin pregnancy, preeclampsia, gestational diabetes and high birth weight are suggested as underlying predisposing factors for perinatal testicular torsion (5-7). Mechanical interaction and fetal distress are known as major risk factors (1). In our case, fetal distress during preterm labour may have been a probable cause. As the patient was referred form another center after birth, it was not possible to obtain detailed information about this issue. Perinatal testicular torsion is usually asymptomatic (2). With careful examination, the time of torsion can be predicted (8). Patients may present with enlarged, red and hard testicle or purple-color changes in the scrotum. The evaluation of clinical findings in our case suggested that the torsion might have developed during or just before the birth. Discussions and debates on the approaches for the treatment of perinatal testicular torsion are still continuing (3, 9). Whether the salvage treatment is obligatory is not clear yet. The success rate of salvage treatment for neonatal or perinatal torsions is between 0 to 7% (9). Some authors advise surgical interventions for the involved testicle to prevent torsion of the contralateral testicle (10). Ischemic duration of four hours after the torsion threatens the viability of involved testicle. Two studies on this issue reported significant atrophy 10 hours after torsion and severe atrophy 24 hours after torsion (8). There is not any consensus on the removal of atrophic testicle since some authors reported the existence of live structures in tortioned testes when not removed surgically. In our case, we preferred conservative approach and we did not detect any impairment in the contralateral testis during the follow-up.

Incarcerated scrotal hernia, scrotal hematoma, hematocele, scrotal abscess, peritonitis due to meconium, epididymitis and neoplasm should be considered in differential diagnosis. Detailed perinatal history, careful physical examination, laboratory and

radiological tests are useful in the diagnosis. All these diagnoses were excluded in our patient accordingly.

Testicular torsion is a rarely seen clinical entity in the neonatal period. Urgent evaluation, prompt consultation if necessary and proper treatment arrangements are necessary for a good outcome. Future studies including larger series of cases with perinatal testicular torsion are needed to develop the optimal treatment modalities in the management of these cases.

REFERENCES

1. Callewaert PR, Van Kerrebroeck P. New insights into perinatal testicular torsion. Eur J Pediatr. 2010;169(6):705-712.

2. Driver CP, Losty PD. Neonatal testicular torsion. Br J Urol. 1998;82(6):855.

3. Yerkes EB, Robertson FM, Gitlin J, Kaefer M, Cain MP, Rink RC. Management of perinatal torsion: today, tomorrow or never? J Urol. 2005;174(4 Pt 2):1579e83.

4. Das S, Singer A. Controversies of perinatal torsion of the spermatic cord: a review, survey and recommendations. J Urol. 1990;143(2):231.

5. Gillenwater JY, Burros HM. Torsion of the spermatic cord in utero. JAMA. 1966;198(10):1123-1124.

6. Leach GE, Masih BK. Neonatal torsion of the testicle. Urology.1980;16(6):604-605.

7. Kaye JD, Levitt SB, Friedman SC et al. Neonatal torsion:

a 14-year experience and proposed algorithm for management. J Urol. 2008;179(6):2377-2383.

8. Lopez RN, Beasley SW. Testicular torsion: potential pitfalls in its diagnosis and management. J Paediatr Child Health. 2012;48(2):E30-32.

9. Sorensen MD, Galansky SH, Striegl AM, Mevorach R, Koyle MA. Perinatal extravaginal torsion of the testis in the first month of life is a salvageable event. Urology. 2003;62(1):132-134.

10. Beasley SW, McBride CA. The risk of metachronus (asynchronous) contralateral torsion following perinatal torsion. N Z Med J. 2005;118(1218):U1575.