

Management of Perinatal Testicular Torsion: A Single Centre Experience

Mohamed Zouari¹, *Hamdi Louati¹, Mahdi Ben Dhaou¹, Imen Abid¹, Riadh Mhiri¹

¹Department of Pediatric Surgery, Hedi Chaker Hospital, 30219 Sfax, Tunisia.

Dear Editor-in-Chief,

Perinatal testicular torsion (PTT) is a rare entity, occurring in 1:7500 newborns (1). It accounts for about 12% of all cases of torsion throughout childhood and is considered almost always extravaginal in origin (2). Although PTT is widely accepted to be an antenatal event, the exact timing and duration of torsion are not known (3). Perinatal testicular torsion usually presents as a bluish-black discoloration of the scrotum associated with a scrotal swelling, which is non-transilluminable. However, due to an important variation in clinical presentation, this condition remains unrecognized in many patients and may be missed or confused with other conditions (4). The management of PTT is controversial, due to the low viability of the testis and the possibility of bilateral torsion (5-7). This is a review of our experience with six cases of PTT, highlighting diagnostic and therapeutic difficulties of this condition. From January 2010 to June 2017, we treated five newborns with PTT (right side [n=2], left side [n=2], bilateral [n=1]). Their mean birth weight was 3.2 kg (range, 2.8-3.8 kg). Their age at presentation ranged from 2 hours to 6 days (mean, 38 hours). Doppler ultrasonography was performed in four patients, and was inconclusive in all cases. All patients underwent emergency exploration and found to have extravaginal torsion of testes. The patient with bilateral PTT had black, hemorrhagic and necrotic testes (**Figure.1**).

Bilateral orchiopexy was performed after detorsion. At 3-month-old, both testes were viable and were in the normal position in the scrotum. In one patient with unilateral PTT, the torsed testis was ischemic but not frankly necrotic, so it was preserved, but on follow-up, it was found atrophic. In the remaining three patients, the testes were frankly necrotic; they were treated with orchiectomy and contralateral orchiopexy. On histology, the removed testes were totally necrotic without any viable testicular tissue. Perinatal testicular torsion is often difficult to diagnose mostly due to an important variation in clinical presentation. A high degree of suspicion is required for early diagnosis and management of this condition. Immediate emergency surgery is increasingly advocated for PTT in the hope of saving the testis (1, 7). Therefore, it is a reasonable option to leave in place even necrotic testis, whenever possible, as some testicular function may still be possible (4).

Key Words: Neonate, Perinatal, Testicular torsion, Tunisia.

*Please cite this article as: Zouari M, Louati H, Ben Dhaou M, Abid I, Mhiri R. Management of Perinatal Testicular Torsion: A Single Centre Experience. Int J Pediatr 2018; 6(5):7639-40. DOI: 10.22038/ijp.2018.29750.2617

*Corresponding Author:

Hamdi Louati, Department of Pediatric Surgery, Hedi Chaker Hospital, 30219 Sfax, Tunisia.

Email: drhamdilouati85@yahoo.com

Received date: Feb.10, 2018; Accepted date: Mar.12, 2018



Fig.1: Bilateral perinatal testicular torsion; (A) Right testicle (B) Left testicle.

REFERENCES

1. Ahmed SJ, Kaplan GW, DeCambre ME. Perinatal testicular torsion: preoperative radiological findings and the argument for urgent surgical exploration. *J Pediatr Surg* 2008; 43:1563-65.
2. Singhal A, Agarwal A, Metuge J, Olsavsky T. Neonatal testicular torsion with an unusual sonographic feature. *J Clin Ultrasound*. 2012; 40(4):243-6. doi: 10.1002/jcu.21889. Epub 2012 Jan 30.
3. Broderick KM, Martin BG, Herndon CD, Joseph DB, Kitchens DM. The current state of surgical practice for neonatal torsion: a survey of pediatric urologists. *J Pediatr Urol*. 2013; 9(5):542-5.
4. Callewaert PR, Van Kerrebroeck P. New insights into perinatal testicular torsion. *Eur J Pediatr* 2010; 169(6):705-12.
5. Djahangirian O, Ouimet A, Saint-Vil D. Timing and surgical management of neonatal testicular torsions. *J Pediatr Surg*. 2010; 45(5):1012-5.
6. Sangüesa Nebot C, Llorens Salvador R, Picó Aliaga S, Garcés Iñigo E. Perinatal testicular torsion: ultrasound assessment and differential diagnosis. *Radiologia* 2017; 59(5):391-400.
7. Al-Salem AH. Intrauterine testicular torsion: a surgical emergency. *J Pediatr Surg* 2007; 42(11):1887-91.