



Bilateral Synchronous neonatal testicular torsion: case series and literature review

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Background

Bilateral Synchronous neonatal testicular torsion (BSNTT) constitutes a rare and tragic event that can lead to testicular loss and infertility if not promptly diagnosed and treated.

Aim



to review the current literature on BSNTT and present a case series to improve understanding of this condition.

Methods:

- Retrospective study , neonatal cases diagnosed with BSNTT over a 10-year period
- **Data collected** : patient demographics, clinical presentations, diagnostic imaging, surgical findings, and outcomes
- **Literature review** (1997 – 2024)

Results:

- Three neonates with BSNTT
- Median age = 3 days (range 1-7 days)
- Symptoms : scrotal swelling, discoloration, irritability (**83%**)
- Ultrasonography : inhomogeneous testicles with hypoechogenic areas (all cases)
whirlpool signs in three cases.



Fig 1: Intraoperative view of BSNTT in a 4-day-old baby

Surgery

Inguinal and scrotal incisions after an average delay of 5.5 ± 1.6 hours, gangrenous testicles detached from the scrotal wall and twisted at least 720° in an extravaginal manner.(Fig1)

Detorsion

resulting in successful testicular salvage in four cases,

Orchidectomy

in two cases.

- **Follow up (24 months):** two patients had successfully salvaged at least one testis
- **Literature review** identified 32 additional cases, showing a consistent pattern of late presentation and variable success in testicular salvage.

Conclusion:

BSNTT is a rare but devastating condition that requires a high index of suspicion and rapid surgical intervention to maximize the chances of testicular salvage