

## Perinatal Testicular Torsion : About A Clinical Case in the Pediatric Surgery Department of CHU Gabriel TOURE

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### ABSTRACT

**Introduction :** Perinatal testicular torsion is a rare pathology, occurring in utero and during the first month of life. We report a case of testicular torsion noted at birth, which allowed us to conduct a literature review.

**Observation :** This was a male newborn, born at 38 weeks of amenorrhea, 2 prenatal consultations carried out and no prenatal assessment carried out. Admitted to the neonatology department for painful right scrotal swelling noted in the delivery room. The clinical examination revealed a good general impression, a recoloring time of less than 3 s. His archaic reflexes were present. He had a bluish right scrotal swelling, hard with the right testicle raised relative to the left side, non-transluminal, and painful on palpation. Scrotal ultrasound revealed a strangulated right inguinoscrotal hernia with pain in the herniated loops that were poorly vascularized on Doppler. The biological assessment came back normal. He underwent surgery. Exploration finds testicular torsion with necrosis. We performed an orchiectomy. The postoperative course was simple.

**Conclusion :** Perinatal testicular torsion is a surgical emergency, the functional prognosis of the testicle is often poor.

**KEYWORDS:** testicular torsion, perinatal, pediatric surgery

### ARTICLE DETAILS

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### INTRODUCTION

Perinatal testicular torsion refers to any testicular torsion occurring from the prenatal period until 1 month of life [1]. A difference in management is described in the literature depending on the time of occurrence of perinatal testicular torsion [1]. Antenatal torsions represent 70 to 80% of neonatal torsions [2]. The etiology and risk factors for perinatal testicular torsion are undetermined; intrauterine stress and traumatic delivery have been proposed as risk factors increasing the probability of this pathology without formal proof [1]. The prognosis is poor and the survival rate for twisted testicles is 5% [5]. The management of newborns presenting with an acute scrotum from birth remains controversial; observation, emergency exploration and delayed emergency exploration have been proposed [2, 3,6]. We report a clinical case of perinatal testicular torsion in a newborn on day 1 of life.

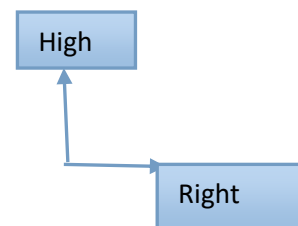
### OBSERVATION

This was a male newborn on day 1, born at 38 weeks gestation, 2 prenatal consultations carried out and no prenatal assessment carried out. The delivery took place vaginally in cephalic presentation. At birth, the weight was 3400g with an Apgar of 10/10. Admitted to the neonatology department for painful right scrotal swelling noted in the delivery room. The clinical examination revealed a good general impression, a recoloring time of less than 3 s. His archaic reflexes were present. He had a bluish right scrotal swelling, hard with the right testicle raised relative to the left side, non-transluminal, and painful on palpation. The abdomen was supple, not distended with preserved transit. Scrotal ultrasound revealed a strangulated right inguinoscrotal hernia with pain in the herniated loops and poorly vascularized on Doppler. The diagnosis of an inguinoscrotal hernia was made and the child was brought to the operating room for surgical exploration, after carrying out a preoperative assessment. Exploration revealed testicular torsion with necrosis (Figure 1). We placed an emergency surgical indication in front of an acute

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neonatal exchange and the intervention was carried out under general anesthesia. Exploration finds extra vaginal testicular torsion with testicular necrosis. We performed a right

orchietomy via the inguinal route. The postoperative course was simple and discharge was authorized on day 3 postoperatively.



**Figure 1 : Intraoperative image of testicular necrosis**

### DISCUSSION

The first neonatal torsion was described by the English surgeon Taylor in 1897 [1]. The etiology and risk factors for perinatal testicular torsion are undetermined. Intrauterine stress and traumatic childbirth have been incriminated as risk factors increasing the probability of perinatal testicular torsion, without formal proof [2]. In our observation, the observation was made in the delivery room just after birth, without any notion of traumatic delivery. Those who prove that it is a torsion that occurred antenatally.. The clinical presentation of perinatal testicular torsion is that of a newborn with a swollen, hard, sore bursa or not present at birth or in the first month of life. In some late cases, one may also have a smaller than normal scrotum [6]. In our observation, we noted a bluish scrotal swelling, hard with the right testicle raised relative to the left side, non-transluminal, and painful on palpation. In our observation, the scrotal ultrasound revealed a strangulated right inguinoscrotal hernia with pain in the herniated and poorly vascularized loops on Doppler. A diagnostic error can increase the risk of testicular necrosis, as was the case in our observation. Perinatal testicular torsion is a surgical emergency that requires surgical exploration via an inguinal approach followed by orchidopexy if the testicle is viable or orchietomy in the event of testicular necrosis [3]. We performed surgery via an inguinal approach and exploration revealed testicular torsion with necrosis requiring orchietomy. The prognosis in perinatal testicular torsion is poor because the risk of testicular necrosis is high [6]. Pinto et al describe a rate of 20% of testicles saved in the follow-up of patients operated on within hours of the onset of symptoms [7]. This poor survival rate compared to that of adolescents is probably linked to several factors, such as poor clinical presentation, physiological and anatomical differences [7].

### 4-CONCLUSION

Perinatal testicular torsion is a rare but serious pathology due to its consequences, namely loss of the testicle. This is a surgical emergency even if the treatment remains controversial.

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