

CASE REPORTS

A NEW CASE OF SCROTOSCHISIS AND EXTRACORPOREAL ECTOPIC TESTIS

G. SANDA¹, H. ABARCHI², A. SOUMANA¹ AND B.S. SOUNA³.
¹Clinic of Urology, ²Clinic of Paediatric Surgery, ³Unit of Orthopaedics,
Lamordé National Hospital, Niamey, Niger

INTRODUCTION

Testicular descent can be described in two phases, the transabdominal and the inguino-scrotal. During the inguino-scrotal phase the testis may deviate from the normal path of descent and "migrate" to an abnormal location; this is called ectopic testis and is a relatively uncommon condition. The common sites for ectopic testes include the superficial inguinal pouch, the perineum, the opposite side of the scrotum, the femoral canal and the pubopenile region. In addition to these well-recognized sites, preperitoneal and extracorporeal ectopic testes, which are extremely rare, have been reported^{1,2}.

In the present report the evisceration of fully descended testicles through an unexplained wound over the neck of the right scrotum at birth is described. It is the first case of a neonate presenting with scrotoschisis and right side extracorporeal testicular ectopia registered in our twenty-year urological practice. The possible etiology and management of this strange anomaly are discussed.

CASE REPORT

G.A, a 14-day newborn was received in the emergency department for external right testis and spermatic cord diagnosed at birth. The history of pregnancy was uneventful. At birth the boy weighed 3,040 kg and measured 49 cm. Physical examination revealed a nor-



Fig.1: Preoperative view showing extracorporeal right testis and spermatic cord outside an empty hemiscrotum

mal left hemiscrotum, while on the right side the testis and spermatic cord emerged out of the scrotal cavity through a 2,5 cm skin defect (Fig.1). The penis was normal on palpation, but there was a phimosis. The right testis and envelopes were normal and viable at surgical exploration, except for a mild inflammatory reaction. Histological examination of the skin defect was not done. Via a vertical scrotal incision, we performed orchidofuniculolysis consisting of vertical splitting of the envelopes of the testis and cord in order to free them from any scrotal wall adhesions and orchidopexy in a dartos pouch followed by a multi-layer closure of the scrotal wall defect. The procedure did not raise any particular problems because of the sufficient length of the spermatic cord. The postoperative period was uneventful.

DISCUSSION

Ectopic testes can be found in the superficial inguinal scrotum, base of penis, perineum, or medial side of the thigh.

Although anomalies of testicular descent are common, scrotoschisis and extracorporeal testicular ectopia are rare with only seven cases reported in the literature.

Scrotoschisis, a congenital defect of the scrotal wall, is often associated with extracorporeal testicular ectopia¹⁻³. The etiopathogenesis of extracorporeal ectopic testis is controversial: a congenital defect in the integrity of the scrotal wall permitting extrusion of the testis to an ectopic extracorporeal location is often considered the main cause⁴⁻⁶. However, neither the theory of hyperactive or misdirected phagocytic action of gubernaculum testis, nor a localized infective or ischemic process have been proven¹. According to Lais et al⁷, arthrogyposis is a possible mechanism of scrotoschisis acquired in utero. This was also confirmed by Davies⁸ who reported a case of a newborn male with arthrogyposis who presented with an exstrophied testicle. The association of a congenital defect of the scrotal wall with consequent testicular exstrophy seems to establish a cause-effect relationship mediated by mechanical factors, i.e. in utero compression of the scrotum by the feet. It has also been postulated that the amnion band sequence mechanism might play a causative role, however the exact mechanism has not been explained⁹.

In the present case, the diagnosis was based on the presence of an empty right hemiscrotum and extra-scrotal testis and spermatic cord.

Treatment of extracorporeal ectopic testes seen by the general practitioner should include a prompt referral to a specialist for immediate surgical treatment consisting of orchidofuniculolysis followed by orchidopexy^{5,10}.

The functional outcome, always difficult to define, appears to be identical to that of other sites of ectopic testes.

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Corresponding Author:
Dr. GANDA Oumarou Sanda,
BP. 407
Niamey, Niger.
E-mail: ganda1@caramail.com