Bilateral scrotoschisis with crossed ectopy of the right testis

Vincent C Onuora
Eshiobo Irekpita
Ugochukwu Alili
Agbomherele Ajekwene
Ihuoma N Amaechi

1Urology Unit, Department of Surgery, 2Department of Obstetrics and Gynaecology, Irrua Specialist Teaching Hospital, Irrua, Edo State, Nigeria

Abstract: Scrotoschisis is an uncommon congenital anomaly in which the testis descends to an extracorporeal position through a defect in the scrotum. Bilateral scrotoschisis is extremely rare. We present a case of a 16-hour old neonate who was referred to our center with both testes protruding through a defect in the left hemiscrotum.

Keywords: bilateral scrotoschisis, crossed testicular ectopy

Introduction
The exact mechanism of testicular descent remains largely unknown. The influence of androgens, increase in intra-abdominal pressure, and the traction action of the gubernaculum all have their proponents. However, there is little controversy regarding the need for the testes to descend into the scrotum. Poor germ cell development, trauma, testicular torsion, and increased risks of malignant degeneration are recognized risks of cryptorchidism. Among the anomalies of testicular descent is extra-scrotal migration of the testis, a situation variously referred to as extrophy of the scrotum or scrotoschisis.

Recently, we managed a child in whom the right testicle migrated superior to the penis to exit the contralateral scrotum together with the left testis. We are not aware of any previous report of this type of anomaly and we report this case as our contribution to the continuing debate about the mechanism of testicular descent.

Case report
A neonate was brought to Irrua Specialist Teaching Hospital Irrua, Edo State, Nigeria, 16 hours after delivery with both testes protruding from the lateral aspect of his left scrotum. He was delivered at home by a 45-year-old mother with the assistance of her landlady. The delivery was uneventful. His mother had her antenatal care at a nearby primary health center but volunteered that she had also taken some herbal concoctions during the first trimester of her pregnancy.

The baby weighed 2.6 kg and was otherwise normal except in the urogenital system. Both testes and some lengths of the spermatic cord were extruded through a defect in the lateral aspect of the left scrotum (Figure 1). The right hemiscrotum was fully developed. Both scrotal sacs appeared inflamed as evidenced by a red and shiny skin.

He had antibiotic cover (ceftazidine and gentamicin) and tetanus toxoid. The scrotum was then cleaned and explored under general anesthesia. Both spermatic cords...
swellings might lead to a scrotal wall defect through which the gonad migrates extra-corporeally. This theory has been challenged by others who pointed out that the testis could not be pulled down to an extra-corporeal site as there is no extra-scrotal anchor from which traction could be applied. Instead, they suggested that scrotoschisis is consistent with the pulsion concept of testicular descent. The fact that the right testis migrated superior to the penis and out of the left scrotum in our patient casts further doubt on the role of gubernaculum in testicular descent. Would the gubernaculum originating in the right scrotum pull the right testis to the left side?

It is generally taught that a scrotum that has not harbored a testis is usually hypoplastic. This is not the case in our index patient. The right scrotum was fully developed but empty. Maybe it is not the mere presence of the testis that induces adequate development of the scrotum. We opine that the same stimuli that initiate testicular descent may also stimulate scrotal sac development.

**Acknowledgment**

The parents of this patient gave permission for a picture of the anomaly to be published provided the child is not identifiable.

**Disclosure**

The authors report no conflicts of interest in this work.

**References**