# A Man Who Had Three 'Balls': Case Report Of A Rare Case Of Polyorchidism

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## I. Introduction

Supernumerary testicles (SNT), also referred to as polyorchidism, are testicles that are present in excess of two. With only roughly 200 cases reported in the literature to date, it is an incredibly uncommon abnormality. A patient with polyorchidism may appear with an acute scrotum or may be asymptomatic and incidentally detected during imaging or physical examination.<sup>1</sup>

## II. Case Presentation

An 18-year-old male presented with pain at the right scrotum radiating to the lower abdomen. The pain started approximately 5 hours prior to the presentation. He never experienced such pain prior to this episode, denied any trauma nor any urinary tract symptoms. He also never noticed any abnormal swelling.

Upon examination, there was no obvious swelling seen and the scrotal skin appeared normal. The right hemiscrotum was tender upon light palpation and the right spermatic cord felt thickened. The contralateral testicle was present and unremarkable upon palpation. Provisional diagnosis given was right testicular torsion and patient was brought to the operating theatre urgently for scrotal exploration.

Upon exploring the right hemiscrotum, there were two testes noted; one of which was twisted and appeared ischemic, and the other was normal. Each of those testes have their own epididymis and vas deferens. The orchidectomy of the ischemic testis was done and orchidopexy of the normal right testis and the contralateral testis was subsequently performed. The patient was well the following day and subsequently discharged.

The histopathological report confirmed that the testis removed has evidence of seminiferous tubules with surrounding Leydig cells at the interstitium.

#### III. Discussion

A study done by Bergholz and Wenke showed that trioorchidism is the most common type of polyrorchidism. The median age of patient during diagnosis was 17 years and majority of cases were found incidentally during surgery performed for other diagnosis such as undescended testis, inguinal hernia, and testicular torsion. They also reported that tumours were found in 6.4% of cases.<sup>1</sup>

Type of polyorchidism is classified by its structure and the ductal drainage. In type A1, the SNT is drained by its own epididymis and vas deferens; in type A2, the SNT has its own epididymis but shares a common vas deferens; and in type A3, the SNT shares a common epididymis. In type B1, the SNT is undrained but has its own epididymis and in type B2, the SNT is undrained and only consist of testicular tissue.<sup>1</sup>

The risk of malignancy in SNT is around 6%. There is a reported cancer incidence of 1% with polyorhidism. The common histological type may include seminoma, choriocarcinoma and teratoma. Cryptoorchidism is the most important risk factor for malignancy for SNT.<sup>3</sup>

The management of polyorchidism is under debate due to its extreme rarity and hence difficult to facilitate evidence-based recommendations. There is a proposed therapeutic algorithm for polyorchidism by Balawender et.al. The management is depending on whether the SNT is located inside or outside the scrotum. For a scrotal SNT, observation is feasible with self-examination of the scrotal mass and ultrasonography and should there be any sign of malignancy, orchidetomy is recommended. For a non-scrotal SNT, orchidectomy is suggested in men beyond the reproductive age whilst orchidectomy is suggested for those within the reproductive age. Similar to scrotal SNT, patients post orchidopexy will be monitored and should there present signs of malignancy, orchidectomy will be recommended.<sup>2</sup>

In the case described above, the SNT is of the type A2 and for obvious reason, orchidectomy was done due to its presentation.



Figure: The ischemic SNT in the right hemiscrotum

#### Références

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