

# Case series on Testicular torsion: an educational emergency for Sub-Saharan Africa

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## Abstract

Testicular torsion remains a common surgical emergency of adolescent males presenting with sudden onset of intense scrotal pain in Africa. While the magnitude of testicular torsion is not known it has been identified as a cause of male infertility. Testicular loss in Africa is directly related to delay in surgery and the referral patterns at the point of first contact with health workers. This paper sets out to demonstrate the importance of the patient's age in the diagnosis of testicular torsion. A surgical audit was made of patients records collected over the last 30 years, for presentation of testicular related symptoms and analyzed to identify changes in the patterns of diagnosis over time and in different countries. There were 305 records found, for patients with an age range of 9-56 years. There were 195/305 (64%) with orchitis and 110/305 (36%) with testicular torsion. Testicular torsion is more common under the age of 18 years while orchitis was more common after 18 years of age ( $\rho = -0.834$ ,  $p$  value  $> 0.001$  one tailed). This paper supports the development of educational interventions that promote the use of age in a simple diagnostic rule of the thumb for communities and lower cadre health workers in low resource settings.

## Introduction

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Testicular torsion is a common surgical emergency of adolescent males presenting with sudden onset of intense scrotal pain [1]. Anatomically testicular torsion follows a congenital anomaly in predisposed individuals that allows the testis to rotate, twisting the spermatic cord, resulting in loss of blood supply and eventual testicular necrosis [2]. Patients usually present with acute onset of severe scrotal pain, with or without a history of trauma in males under the age of 18 years. The extent of testicular rotation determines the time to total testicular loss. Since the anomaly is commonly bilateral definitive management requires early identification by the first contacted health worker followed by prompt surgical intervention.