# **Case Report**

# Mishandling of Testicular Swelling resulting in huge Scrotal Mass

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**Abstract:** Local spread of testicular tumor to the scrotum is very rare because of the investing tunica albuginea of the testis. The tunica once breached may lead to infiltration of the tumor cells in the scrotum. We present a case of a 34 year old man who had a yolk sac carcinoma of the right testis for which orchiectomy was performed. He later on presented with a huge fungating mass of the scrotum after 2 yrs. The mass got infected and he developed septicemia.

Keywords: Testicular tumor, Yolk Sac carcinoma, Scrotal mass

### Introduction

The patients with testicular tumors classically present as having a painless firm mass. The extent of the disease depends upon duration. The disease; if spreads involves aortic lymph nodes and may metastasize to lungs. Locally it invades spermatic cord and overlying scrotal skin. But very rarely the local spread in the scrotum gives a look of a fungating mass. Such a case is presented here.

#### **Case Presentation**

A 34year old man presented in the outpatient department with a huge scrotal mass with pain and bleeding, significant weight loss and fever for last four months. Initially the swelling was small and treated by a local general practitioner with topical medicines but the swelling rapidly increased. The past history was significant as 2 years back he had a right testicular swelling for which he underwent incision and drainage and a biopsy. The histopathology revealed a testicular tumor and he was referred to the local hospital for further management, where he underwent radical orchiectomy from inguinal approach. The histopathology of the removed testis showed yolk sac tumor that was limited to the testis and the spermatic cord was free of the tumor. His abdominal and chest CT done afterwards showed no spread of the tumor to lymph nodes or lungs and he was then referred to the oncologist.

The patient did not comply with the further treatment

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offered and did not consult the oncologist. Now after 2 years, he patient presented with a scrotal mass, with high grade fever and pallor.

He had significant weight loss of 9 kg in past 3 months. On examination the patient was cachexic, anemic with ill looking face and febrile with fever of 103°F. He had pulse of 116 beats/min, BP of 80/60 and respiratory rate of 32/min.

There was a 25 × 22 cm mass, infected with fowl smelling pussy discharge and few bleeding points. The left testis was pushed upwards by the mass and bilateral inguinal lymph nodes were palpable. Abdominal examination was unremarkable and chest examination showed bilateral basal crepitating and harsh ronchi. Diagnosis of septic shock was made and he was shifted to Intensive Care Unit in an isolated room. The treatment for sepsis began and biopsy from the mass was taken that showed yolk sac carcinoma of the scrotum. His lab investigations revealed severe anemia of hemoglobin of 4.8g/dL and total leukocyte count of 21,000 mm³. Despite prompt treatment of sepsis he succumbed to septicaemia the same night.

## Discussion

Involvement of scrotal skin is very rare in testicular tumors due to tough tunica albuginea investing the testis¹. The tunica has to be breached before it invades the scrotal skin. A case of giant testicular tumor causing scrotal gangrene has been reported². The gangrene could have occurred because of either the pressure effect of the huge mass or by the direct infiltration of the tumor into the skin. In our case the patient underwent incision and drainage initially for a localized testicular mass which was thought to be an abscess, where seedling of the tumor possibly has occurred in the scrotal skin. The patient underwent orchiectomy from the in-

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guinal approach then but the scrotum was already involved and led to a huge fungating mass. (Figure 1)



Fig.1 Huge yolk sac tumor involving the scrotum

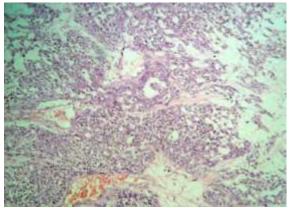


Figure 2. Classical reticular &trabecular pattern of yolk sac tumor (H&E x 100)

There are 2 previous case reports of fungating scrotal mass secondary to testicular tumor infiltration from India. Nabi reported the first case in 2002 while the second case was reported by Yadav in 2008<sup>3&4</sup>. In the second case the patient underwent orchiectomy from the scrotal incision and then presented after 6 months with a fungating scrotal mass. In order to avoid the seedling of the tumor cells, the surgeon must approach with high inguinal incision, first ligating the cord and then performing orchiectomy. This reduces the chances of local seedling and also the spread of the tumor from the cord via blood stream or lymphatics while manipulating the tumor.

In our case the scrotal spread occurred when the tunica was breached by incision and drainage, leading to local infiltration of the tumor. For any testicular mass it is very important to know beforehand that it is not something dangerous the surgeon is dealing with. The diagnosis is based on clinical history and examination, and ultrasound of the testis gives much of a clue which will

determine whether the mass is intra- or extratesticular. Intratesticular masses are presumed to be testicular cancer until proved otherwise<sup>5</sup>. The tumor markers although not diagnostic, should be sent to stage the disease and also for the follow up. The exact diagnosis is made on histopathology, only after the testis is removed completely by inguinal approach.

The presentation of our case was late possibly because of the financial issues and or negligence on the part of the patient. The patient didn't consult the oncologist after the orchiectomy. This led to fungating yolk sac carcinoma of the scrotum. Unaccepted by the patient and attendants the mass got infected leading to septicemia to which he succumbed.

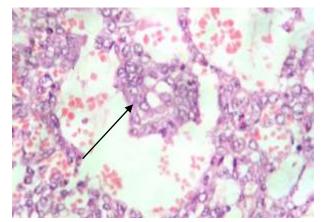


Figure 3. Schuller-Duvel Body in Yolk sac tumor (Arrow) H&E X  $400\,$ 

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