Case Report

# POST ORCHIDECTOMY VASOVAGAL SYNCOPE- AN INTERESTING CASE REPORT

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### **ABSTRACT**

Unilateral simple orchiectomy is performed to remove a nonviable testis found on exploration for testicular torsion or chronic infection or as a last-line treatment for intractable and debilitating chronic orchalgia. Some of the complications of orchidectomy are scrotal or inguinal haematoma or infection, retroperitoneal haemorrhage, etc. Post orchidectomy pain is a rare complication. 19 year old boy presented with vasovagal syncopal attacks post orchidectomy for testicular torsion, which is a very rare complication.

**Keywords:** Orchidectomy, Vasovagal Syncope, Chronic Scrotal Pain

#### INTRODUCTION

Chronic orchialgia is a well described urological manifestation of a chronic pain syndrome defined as unilateral or bilateral testicular pain that is constant or intermittent and has lasted for more than 3months. Chronic scrotal content pain may be a more accurate description of this condition as it does not exclude pain in the scrotum that is not derived solely from the testicle but also the epididymis and spermatic cord. Chronic scrotal content pain is a debilitating condition which can inhibit one's ability to perform activities of daily living including work, and physical and sexual activity. Therefore, it can pose a significant challenge to manage and treat.

## **CASES**

19year old male with no known co-morbidities presented with complaints of left hemiscrotal pain for 1 day. Ultrasound scrotum showed left testicular torsion. Routine investigations were normal. Patient was planned for bilateral orchidopexy. During surgery, the left testes were found to be non-viable. Hence left orchidectomy and right orchidopexy was done. Post op period was uneventful and patient was discharged. During follow up few months later patient presented with repeated episodes of left groin pain. Ultrasound scrotum showed left funiculitis and right early orchitis. Patient was admitted and treated conservatively with antibiotics and analgesics. During his hospital stay it was found that patient had several syncopal attacks during episodes of severe pain and following scrotal palpation. Cardiologist opinion was sought and he suggested it to be vasovagal syncope secondary to pain. Despite vigorous treatment with analgesics and anti-inflammatory agents, syncopal attacks did not subside. Hence surgical intervention was planned and patient underwent left funiculectomy. Post op period was uneventful and patient did not have any further episodes of pain or syncopal attacks.

### **DISCUSSION**

Chronic pain is a complex process which is poorly understood, and thought to be secondary to an inciting noxious stimulus which leads to the process of sensitization and plasticity of the peripheral and central nervous systems, allowing for up-regulation of pain pathways (Woolf and Salter, 2000; Voscopoulos and Lerna, 2010). This up-regulation ultimately can lead to a spontaneous firing of nerves such that no noxious stimuli are necessary to generate the pain impulse (Bolay and Moskowitz, 2002). Chronic scrotal content pain is believed to develop from numerous direct sources, including previous trauma; pelvic, inguinal or scrotal surgery; after infection; after torsion; referred pain from the hip or spine; diabetic neuropathy; and after vasectomy, and it is most commonly idiopathic (Morris *et al.*, 2002; Granitsiotis and Kirk, 2004). In fact, up to 43% of patients with chronic scrotal content pain have been reported to

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## Case Report

have no identifiable cause for their symptoms (Davis *et al.*, 1990; Strom and Levine, 2008). Conservative treatment is recommended before more invasive therapeutic modalities such as surgical correction.

Chronic scrotal content pain may develop independently of a known surgically correctable factor. Chronic scrotal content pain can occur as a result of a variety of etiologies, some of which are readily reversed (i.e. varicocelectomy, spermatocelectomy). However, when the pain is more diffuse and/or there is concern that the pain has become chronic, we believe that the surgery which most appropriately addresses pain is Microdenervation of spermatic cord (MDSC) when there is a positive response to a spermatic cord block. An identifiable physical abnormality may be present but often pain is not due to this identifiable noxious stimulus. Nevertheless, it is not until the afferent nerves are interrupted with MDSC that pain has been shown to resolve in up to 71% in men who underwent surgery to eradicate the pain 5. Heidenreich *et al.*, (2002) reported the highest rate of success with a complete response in 96% of patients at a mean follow-up of 31.5 months. This high rate of success was attributed to meticulous diagnostic evaluation with spermatic cord block using saline as placebo and multiple local anesthetic agents as an initial diagnostic tool to predict postoperative outcome.

#### **Conclusion**

Orchidectomy has been suggested as one of the treatment options for chronic or intractable scrotal pain. But our patient had chronic scrotal pain even after orchidectomy for which he was managed surgically with funiculectomy. Post vasectomy pain has been reported till date. But post orchidectomy pain is a rare entity and post orchidectomy vasovagal syncope is an even rarer entity which has not been reported much.

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