

# **Original Research Paper**

# **General Surgery**

## A CLINICAL STUDY ON ACUTE SCROTUM

International
Dr. C. Hemanth
Mahesh

Post Graduate, Department of General Surgery, Narayana Medical College, Nellore

Dr. B. Yochita\*

Post Graduate, Department of General Surgery, Narayana Medical College, Nellore \*Corresponding Author

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#### **INTRODUCTION:**

Acute scrotum is one of the common swellings noted in the surgical outpatients. Not all Acute scrotum requires exploration but need either surgical exploration immediately or medical therapy. Testicular Torsion is a true surgical emergency as testicular salvage decreases, as the duration increases. Torsion of Appendix testis, epididymo-orchitis, trauma to testis, Haematocele, strangulated inguinal hernia are few other causes. 1

The patient history and physical examination are key to the diagnosis of acute scrotum. Imaging studies will complement clinical judgment. Ultrasonography, Doppler studies are being done routinely. The main objective in the management of the acute scrotum is to avoid Testicular loss. This requires a high index of clinical suspicion and prompt surgical intervention.

#### **AIM OF THE STUDY:**

this study is aimed at identifying the clinical presentation and management of acute scrotum.

### **METHODOLOGY:**

this is a prospective, observational study done in the department of General Surgery, Narayana Medical College, Nellore during august 2016 to January 2019. Cases presenting with acute scrotal pain were selected, history, clinical findings, investigations, management were recorded and analysed.

# RESULTS:

### Table no 1: age distribution in the study group

Age in years	No of cases	Percentage
16- 25yrs	6	23
26- 35 yrs	5	19
36 – 45 yrs	5	19
46 – 55 yrs	3	12
>56yrs	7	27

# Table no 2: occupation

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Occupation	No of cases
Labourer	16
Students	10

# Table no 3: duration of symptoms

Duration	No of cases
1 day	8
2 days	3
>3days	15

# Table no 4: distribution of cases

Diagnosis	No of cases
Testicular torsion	6
Fourniers gangrene	4
Scrotal wall abscess	2
Pyocoele	3
Epidydimo orchitis	7
Hematocoele	4

### Table no 5: management of the cases

Treatment	No of cases
Orchidectomy and contralateral orchidopexy	4
Bilateral orchidopexy	2
Debridement	4
Incision and drainage	2
Scrotal exploration and I&D	4
Antibiotics and observation	10

#### Discussion:

The incidence of testicular torsion is about 1 in 4000 males.  $^4$  it can be due to congenital anamolies, testicular tumors, cryptorchidism and the horizontal lie of the testicle.  $^5$  acute tender, and inflamed scrotum, with absent cremasteric reflex, and tenderness unrelieved by elevation of the scrotum are clinical findings. Color Doppler ultrasonography is the imaging modality of choice with accuracy rate of 97%  $^7$  But it is operator dependent. Immediate surgical exploration is the standard treatment with bilateral orchidopexy if the testis is viable and hemiorchectomy for the infracted nonviable testicle. The salvage rate may be as high as 100% if the testicle is explored within 6 h, within 6 to 12 h testicular salvage rates decrease to 70%, and from 12 to 24 h it is diminished to 20%.  $^8$ 

Acute epididymitis an inflammation of the epididymis, when infection is severe and extends to the adjacent testicle; it is referred as acute Epididymo orchitis. Primary abscesses of the scrotal wall are not uncommon. These occur from infections of the hair follicles or sweat glands or through abrasions of the skin. They behave as localized abscesses and are treated similarly, that is with warm wet compression, incision and drainage.

In our study testicular torsion and trauma were common in 15-35 yrs and forniers gangrene pyocele were noted in elderly age group >45 -55yrs.

In a study done by B. Sobha Rani et al<sup>10</sup>, most of the patients were in age group of 31-40 years (50%), presenting feature being scrotal swelling as a main complaint in 60% of cases, Right side was dominant side of presentation than the left with a difference of 40%.

In a study done by Subramani et al<sup>11</sup> in 70 cases of acute scrotal swellings during April 2014 to September 2014 in Government Royapettah Hospital, Kilpauk Medical College, Chennai. Epididymoorchitis was the common cause followed by epididymitis and pyocele. Acute swelling of scrotum was common in younger patients. The maximum incidence occurred during the first 3 decades of life. The mean age of occurrence for Fournier's gangrene in our study was 57.25 years and epididymo-orchitis was 26.56 years.

### **CONCLUSION:**

Acute scrotal swellings affect the whole life of the patient in the aspect of sterility. So, it needs meticulous examinations, proper evaluation and aggressive management. The primary objective of management of acute scrotum is to avoid testicular loss. Surgical

exploration undertaken without delay maximizes chances of testicular salvage.

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