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**30 case report**

# A RARE CASE REPORT:

# SUPERNUMERARY TESTIS

DR. PARTH R PRAJAPATI, 3RD YEAR RESIDENT, SCL HOSPITAL, NHL MMC, AHEMDABAD, GUJARAT. appiguj@gmail.com

DR. NAMAN K PATEL, ASSISTANT PROFFESOR, SCL HOSPITAL, NHL MMC, AHEMDABAD, GUJARAT. forum99i@gmail.com

**ABSTRACT**

Introduction: Poly-orchidism is a rare congenital anomaly with less than 100 cases reported in the world literature. As many theories have an etiology regarding poly-orchidism but still exact etiology is not clear. But majority patient presents with painless scrotal/groin swelling. In rare presentation it may present with an indirect hernia, varicocele, hydrocele, epididymitis, mal-descended testis. The majority have tri-orchidism and the supernumerary testis is most frequently found on the left side.

Aims: This is a study of rare case report of tri-orchidism of 3 yr. male child present with absent left side testis. On exploration found that two testes were with the vas having distally 2 limbs draining both testis in the 'Y' fashion.

Result: In case of this tri-orchidism ideally plan of management is various. If investigation vise testis found atrophied or non-functional then plan of management should be orchidectomy. In this case as clinically both the testis appeared normal both the testis was placed in the left scrotum and orchidopexy was done

Conclusion: Poly-orchidism may be a rare genitourinary abnormality and its management is still controversial. The management will depend upon the location, size and anatomical organization of the testicular drainage system and the age of the patient.

**Key words**:

Poly-orchidism, scrotal mass, orchidopexy.

## INTRODUCTION

Poly-orchidism is an extremely rare congenital anomaly of the urogenital system and is defined as the presence of more than two testis [1]. The most common presentation of Poly-orchidism is tri-orchidism [2]. Left side is affected most commonly. More than half of the cases are presented at age between 15 and 25 years [3]. The most of patients remains asymptomatic or having clinical symptoms of painless groin or scrotal masses, undescended testis, and rarely, torsion of the supernumerary testis [4].

Case Presentation:

A 3-year-old male patient was admitted in our department with the complaint of absence of testis in left scrotum. His medical history was unremarkable and there was no history of trauma. On physical examination,

his right testis was located normally in the scrotum, while his left testis was felt in the left inguinal region. On ultrasonography (US), the right testis was 18×13mm in size and normal in echo texture and the left testis was 13×10mm size, normal in echo texture located in the left inguinal region. The diagnosis of undescended testis was made on the basis of clinical and investigation reports and plan was decided for inguinal canal exploration sos orchidectomy. On operation of the left inguino-scrotal region, two testes were found with the vas having distally 2 limbs draining both testis in the 'Y' fashion. The smaller one (measuring 1cm×1cm) was found at a higher level than the larger one (measuring 1.5cm×1cm). Both have independent vascular supply. And had the testis were fixed in left scrotal pouch.

Intraoperative findings

Discussion:

The first histological description of poly-orchidism was published in 1880 by Ahlfeld, while the primary clinical case was reported by Lane in 1895[2]. Poly-orchidism is an uncommon birth defect defined as the presence of more than two testis [6]. However, it might be associated with an embryological developmental abnormality. In this type of unusual abnormality of the genital tract, most patients with supernumerary testicles are asymptomatic and have painless groin or scrotal masses [4]. Sometimes, the primary accompanying disorders and/or anomalies include cryptorchidism, undescended testis, infertility, indirect inguinal hernia, torsion, epididymitis, malignancy, hydrocele or varicocele [5].

The most of the affected patients have tri-orchidism and as within the present case the supernumerary testis is most frequently found on the left side [4]. It is also associated with other anomalies [in about 80% case] like mal-descent of the testis, cryptorchidism and indirect inguinal hernias (35%) [5].

Poly-orchidism is in majority of times accidental findings and found while performing inguinal canal exploration/procedure or inguinal hernioplasty. Though it is difficult to differentiate between rare benign conditions from malignant disorder an expertise sonography may helpful in that case and avoid unnecessary exploration of inguinal canal. In pediatric patient surgical exploration of inguinal canal is mandatory due to its association with mal-descent testis [6].

During embryogenesis, approx. at six weeks, the from the primitive genital ridge medial to the mesonephric ducts the primordial testis develops. From the mesonephric (wolffian) duct vas deferens and epididymis develops at 8 weeks. During this embryogenesis if Duplication of the genital ridge and mesonephric ducts occurs in the horizontal or longitudinal plane it may cause various types of poly-orchidism [4].

Anatomical variations: -

Type-I: supernumerary testis lacks an epididymis or vas and has got no attachment to the usual testis.

Type-II: the supernumerary testis drains into epididymis of usual testis and they share a common vas.

Type-III: the supernumerary testis has its own epididymis and both epididymis of the ipsilateral testes draining into one vas.

Type-IV: complete duplication of testes, epididymis and vas.

The most common type is type no. 2 and Type-II & Type-III together account for more than 90% cases of poly-orchidism

Poly-orchidism is usually identified during orchidopexy as in our case and during repair of an indirect inguinal hernia. Biopsy was not done in our case as the size of the testis was very small. Testicular biopsy is rarely indicated in pediatric population [7]. Follow up of these patients is advised once a month for first 3 months, then every 6 months for the next 2 years and later every 2 years up to adolescence by palpating the testis and ultrasonography.

## CONCLUSION:

Poly-orchidism may be a rare genitourinary abnormality and its management remains controversial. The management will depend upon the location, size and anatomical organization of the testicular drainage system and the age of the patient. The case presented here is characterized by presence of two testicles of unequal size in the left sided disposed in two different levels with two epididymis and single vas. In this case as clinically both the testis appeared normal both the testis was placed in the left scrotum and orchidopexy was done.

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Nil

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