Dept. of General Surgery,
Dr. D.Y. Patil Medical College, Pune

Transverse Aberrant Testicular Maldescent With Inguinal Hernia – A Rare Case

Dr. Omkar Shirke (Resident)

INTRODUCTION

- Normally both the testes descent through the ingiunal canal of same side into the respective hemiscrotum.
- Transverse aberrant testicular maldescent is a rare anomaly of abnormal testicular migration.
- It is characterized by the descent of both the testes through one inguinal canal towards the same hemiscrotum.

- Usually the diagnosis is incidentally found on surgical exploration similar to our case being presented here.
- Usually it is associated with presence of inguinal hernia.
- It is usually reported in children. Very few cases have been reported in adults.

PRESENTATION OF CASE

- A 24 year old, unmarried male patient presented to our surgery OPD with absence of testis in the right hemiscrotum since birth, with a swelling in the left inguinal region since 1 year.
- On examination, the right inguinal region was normal with empty underdeveloped scrotum with absent testis.
- There was a left indirect, incomplete, reducible inguinal hernia with thickened spermatic cord and normal left testis.
- Our clinical diagnosis was right undescended

INVESTIGATIONS

- **Hematological and biochemical investigations** were normal.
- **Sperm count** was normal.
- **Ultrasonography** of abdomen and inguinoscrotal region revealed absence of testis on the right side along with left inguinal hernia with a **markedly thickened** left sided spermatic cord.

- ***Magnetic resonance imaging (MRI) of pelvis revealed left inguinal hernia with omentum as its content.***
- ***There was absence of testis on the right side which could not be located intra-abdominally.***
- Also it revealed a tubular soft tissue density lesion traversing the left inguinal canal extending upto the superficial ring, suggestive of a thickened spermatic cord.

SURGICAL PROCEDURE

- Right side inguinal exploration with left side hernioplasty was planned.
- There was left indirect, incomplete ingiunal hernia with left testis present in the left hemiscrotum. The ectopic testis was found in the left inguinal canal near superficial ring and the spermatic cord was thickened.

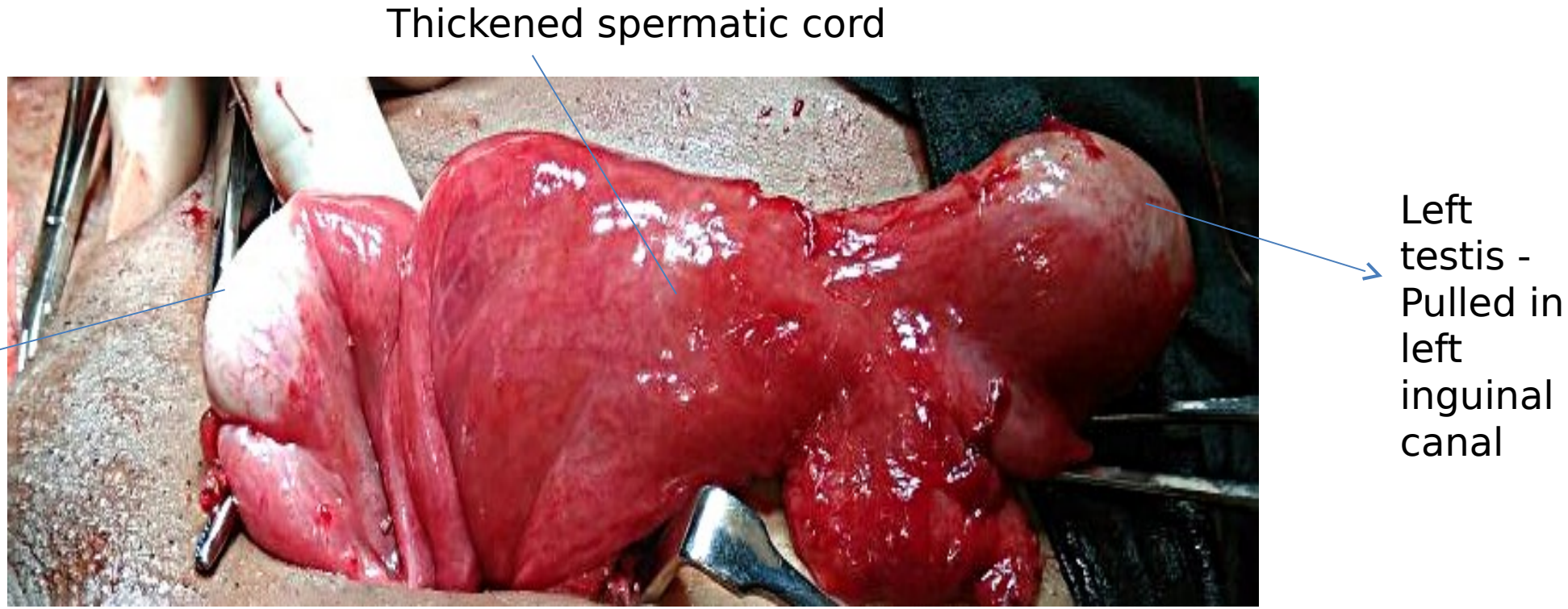

Figure 1: ***Intra operative findings-*** The left testis was present in the left hemiscrotum, the right ectopic testis was found in the left inguinal canal and the spermatic cord was thickened and the 2 spermatic cords were fused.

- On dissecting the thickened spermatic cord, vessels and vas of atrophic testis were seen along the left cord suggesting the fusion of two spermatic cords.
- Orchidectomy was done for right ectopic testis which was small and flabby present in the left inguinal canal.
- Left side hernioplasty was done with prolene mesh for the left inguinal hernia.
- Right side inguinal canal was explored to confirm the absence of right side spermatic cord along with the vessels which showed absence of testis and spermatic cord.

- **Histopathology** of the excised ectopic testis was suggestive of an atrophic testis.
- Patient had an uneventful post-operative recovery without any complication.

DISCUSSION

- *Transverse aberrant testicular maldescent* is also known as transverse testicular ectopia, testicular pseudoduplication or unilateral double testes.
- It is an extremely rare anomaly characterized by the descent of both the testes through the same inguinal canal.
- This condition was first reported by Von Lenhossek in 1886.

The Surgical anatomy

- Each testis has its own blood supply from its corresponding side. During its route of descent , the spermatic vessels of the ectopic testis cross the midline and traverses through the contralateral internal ring, along with the spermatic cord of the other normal testis. Fusion of the two spermatic cords in the inguinal canal is common and is usually inseparable.
- Transverse aberrant testicular maldescent may have an increased risk of malignancy as in any other forms of ectopic testis or undescended testis which is around 18 %.

- Transverse aberrant testicular maldescent is classified into 3 types

1) Associated with inguinal hernia alone (40-50% cases).

2) Associated with persistent Mullerian duct structures(30%).

3) Associated with other anomalies other than Mullerian remnants- *hypospadias, true or pseudo hermaphroditism and other scrotal abnormalities.*

- Management for this condition is orchidopexy or orchidectomy depending on viability status of testis.
- In our case orchidectomy of ectopic testis was done since the ectopic testis was flabby and atrophic .

CONCLUSION

- Transverse aberrant testicular maldescent is a rare anomaly and can be considered a possibility if there is a clinical presentation of inguinal hernia on one side with absence of testis on the other side.
- Mostly these cases are incidentally found on surgical exploration and carry importance since they have a risk of malignant transformation.
- Management for this condition is orchidopexy or orchidectomy.

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THANK YOU