

A Rare Presentation of Congenital Inguinal Hernia with Umbilical Hernia in Twins

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Abstract

Background: Although congenital anomalies are higher in twins than in singletons but the incidence of congenital indirect inguinal hernia with umbilical hernia in twins on the same side is extremely rare condition and is unusual.

Although it is accepted as developmental anomaly, genetic factors cannot be excluded due to probability of existence in siblings.

Case Report: One year old Monozygotic identical twins presented with swelling on the left side of the groin and swelling in the umbilical region since birth. Birth history -full term normal vaginal delivery. Left groin swelling was non tender, and used to increase when the child cried, extended from groin up to base of scrotum and was reducible in both the twins.

Umbilical swelling was non tender, and used to increase when the child cried & was reducible in both.

Conclusion: Inguinal hernia in twins are extremely rare, as there are only a few cases on record. Little is known about its etiology, and prevalence, owing to the difficulties in tracing the twins with hernia. It needs extensive further study involving a wider study group and inclusion of genetic factors to find out prevalence & cause.

Keywords: Congenital Inguinal Hernia, Genetic Factors, Identical Twins

Introduction

- Although congenital anomalies are higher in twins than in singletons but the incidence of congenital indirect inguinal hernia with umbilical hernia in twins on the same side is extremely rare condition and is unusual.[1]
- Although congenital inguinal hernia is one of the commonest surgeries performed in infancy and early childhood the literature on its etiology and incidence is scanty due to the difficulties entailed in obtaining a large unbiased population group for study.[2]
- Although it is accepted as developmental anomaly, genetic factors cannot be excluded due to probability of existence in siblings.

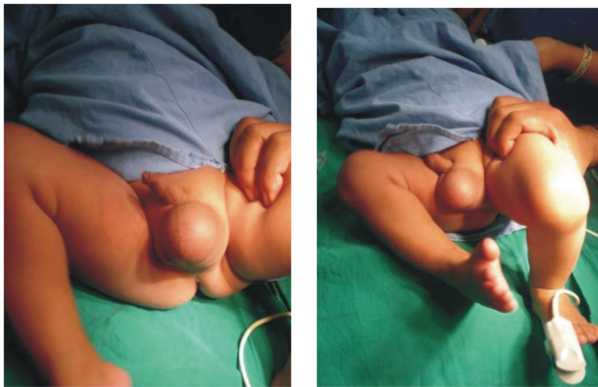
Embryology[3]

- The occurrence of a congenital inguinal hernia is related to descent of the testis into the scrotum.
- The testis starts developing in the abdomen and eventually descends into the scrotum.
- As the testes descends into the scrotum a membrane surrounding all the abdominal contents gets pulled into the scrotum with the testes. This is called the processus vaginalis.
- The testes usually reaches the scrotum by

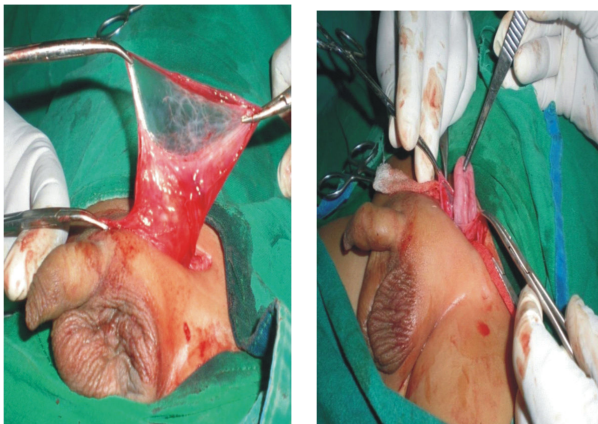
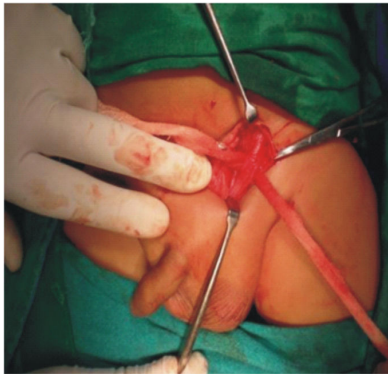
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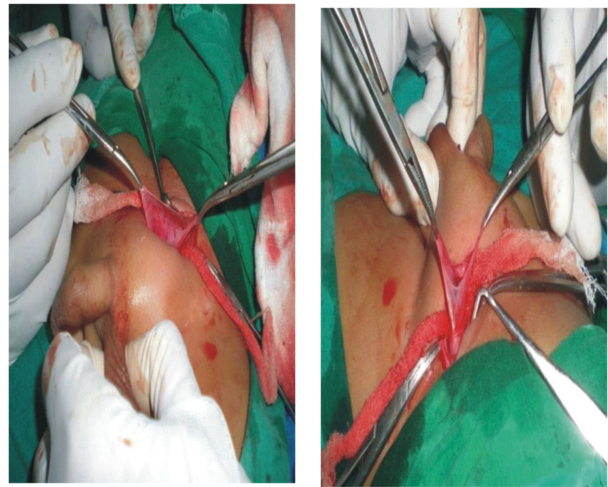
Preoperative Photographs



Intra Operative Photo 1st Twin



Intra Operative Photographs 2nd Twin



the third trimester.

- In approximately 90% of children, the processus vaginalis seals shut and becomes a thin band of tissue without an opening.
- If all or any portion of the processus remains open it may cause either a congenital inguinal hernia or a hydrocele.
- In females, hernias are less common but inguinal hernia and, more rarely, a hydrocele may occur.

Case Report

- One year old Monozygotic identical twins presented with swelling on the left side of the groin and swelling in the umbilical region since birth.
- Birth history –full term normal vaginal

delivery.

- Left groin swelling was non tender, and used to increase when the child cried, extended from groin up to base of scrotum and was reducible in both the twins.
- Umbilical swelling was non tender, and used to increase when the child cried & was reducible in both.

Discussion

- Although inguinal hernia has been previously diagnosed in twins, as well as in relatives of patients with hernias, a genetic basis for the condition has not been established yet.
- In a study including 266 twin babies the incidence of hernia is less than 1%. [4]
- So far since a very scanty number of case of bilateral inguinal hernia in male twins, has been reported. The literature cites only two such other case of inguinal hernia in twins. [1]

Conclusion

- Inguinal hernia in twins are extremely rare, as there are only a few cases on record.
- Little is known about its etiology, and

prevalence, owing to the difficulties in tracing the twins with hernia. [2]

It needs extensive further study involving a wider study group and inclusion of genetic factors to find out prevalence & cause. [4]

- This case report has been prepared not because of any radical surgery or new techniques of surgery but due to the very rare occurrence of congenital inguinal hernia in twin males on the same side at the same age.

References

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