

## **LEFT CONGENITAL LUMBAR HERNIA ASSOCIATED WITH ANORECTAL MALFORMATIONS- A RARE ASSOCIATION**

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### **ABSTRACT**

Hernias in lumbar region in association with anorectal malformation are a rare occurrence in the literature. They may be associated with other malformations. Early management is necessary in order to avoid the complications related to obstruction and strangulation. As very few cases have been reported in literature, we are prompted to report this with a wide review of literature.

**KEYWORDS:** Lumbar hernia, lumbocostovertebral syndrome, anorectal malformations.

### **INTRODUCTION**

Abdominal hernias are quite common in the anterior abdominal wall as compared to lumbar hernias, which are very rare and only around 60 cases have been described in literature so far.<sup>[1]</sup> Lumbar hernias were first described by Barbette in 1672, but first published by Garangeot in 1731. It can be divided into superior and inferior triangles, known by the names of Grynfeltt (1866)<sup>[2]</sup> and Petit (1783)<sup>[3]</sup> respectively, who described them. It can present at birth or in an older child. It is often associated with other malformations, like hydronephrosis, anorectal malformations, vertebral anomalies, cardiac or other musculoskeletal anomalies.<sup>[4-7]</sup> We are describing the case of a neonate with congenital lumbar hernia and anorectal malformations.

### **CASE REPORT**

A 2 days old male child presented to us with complaints of left sided abdominal swelling, which increased in size on crying. The baby was 35 weeks preterm, delivered by vaginal route, with a birth weight of 2.3 kg, in hospital with delivery attended by a trained birth attendant. The baby cried immediately after birth and was breastfed within half an hour of birth and was exclusively breastfed thereafter. He was referred to us in view of imperforate anus and congenital lumbar hernia (fig 1 and 2). On examination, the child was also found to have bilateral congenital talipes equinovarus. The antenatal period was uneventful. The mother was booked, immunized, 24 years old primipara, with normal antenatal scans done at 12 and 21 weeks of gestational

age. Left colostomy was done in the child and was then discharged on follow up for the repair of lumbar hernia.



**Fig 1: Left sided congenital lumbar hernia associated with anorectal malformation and bilateral congenital talipes equinovarus.**



**Fig 2: Same patient with lumbar hernia.**

### DISCUSSION

The superior lumbar triangle is the larger and more constant of the two triangles in lateral abdominal wall. Its boundaries are formed superiorly by 12<sup>th</sup> rib and lower edge of serratus posterior inferior muscle, anteriorly by the posterior border of internal oblique muscle and posteriorly by the sacrospinalis muscle. The floor is formed by the fascia transversalis and aponeurosis of the transversus muscle of the abdomen. The inferior triangle is formed by iliac crest as base, latissimus dorsi medially and external oblique laterally. The lumbar hernias can be congenital in 20% of the cases and acquired in 80% of the cases.<sup>[4]</sup> Congenital hernias more commonly arise from the inferior triangle and are associated with other anomalies as well. The hernia can result due to rib anomalies, called as the lumbocostovertebral syndrome when associated with the vertebral anomalies as well, weakness of the muscles or due to trauma, and infections in acquired cases. The diagnosis can be made by x-ray which can reveal air fluid level in cases of bowel herniating through the defect. Ultrasonography and CT scan of the abdomen can be done to confirm the diagnosis and to identify the contents of the sac. Diagnosis is often delayed as they are wide necked and strangulation is rare.

Management includes surgical reduction of the defect which can be accomplished by primary surgical closure in small defects and meshplasty in larger defects. The surgery should be performed early so as to avoid the complications related to obstruction and incarceration of the hernia contents. Recent advances in the management include the use of laparoscopic reduction of the hernia. The procedure has the advantage of smaller incision, shorter hospital stay and has been found to be safe and feasible in these children.<sup>[8]</sup> So, the decision for the choice of surgical procedure should be done on an individual basis taking into account the size of the hernia, financial status of the patient and patient preferences.

### CONCLUSION

Congenital lumbar hernia should be managed before 1 year of age, so that complications related to obstruction and incarceration can be avoided.

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