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Original Research Paper

Neonatology

LUMBOCOSTOVERTEBRAL SYNDROME (LCVS) - A RARE ENTITY

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KEYWORDS : Lumbar hernia, Rib abnormalities

CASE SUMMARY-

Full term female neonate, weighing 2.7 kg, was born to 37-year-old mother with an uneventful antenatal course. On examination, child was active and anthropometric parameters were normal. Head to toe examination revealed a globular swelling below left costal margin lateral to dorsolumbar spine measuring approximately 6 cm X 6 cm. It was soft, nontender, reducible and used to become prominent on crying. Rest of general and systemic examination was normal. X-ray of chest and spine showed dysplastic 9th, 10th, 11th, 12th thoracic vertebrae (Fig 1 *red arrow*) with absent left 9th, 10th. 11th, 12th ribs (Fig 1 *blue arrow*) and left lumbar hernia (Fig 1 *yellow arrow*). Ultrasonography abdomen showed a hernial defect in left lumbar region measuring 5 cm X 5 cm containing small bowel loops. Ultrasonography spine showed spina bifida occulta. Echocardiography was normal. Lumbar hernia was repaired by pediatric surgeons, operative findings showed 5 cm X 4 cm hernial sac containing small bowel loops. Child had uneventful post-operative course and discharged successfully. Baby was advised regular follow up.

Lumbocostovertebral Syndrome (LCVS) is a rare disorder which was first described by Touloukian in 1972.[1] It comprises triad of abnormalities of abdominal wall musculature (Lumbar Hernia), rib and vertebral anomalies. LCVS involves other anomalies like, spinal cord malformations, talipes equino varus deformity, and inguinal hernia etc. [2, 3]. It can be associated with VACTERL (*Vertebral, Anal, Cardiac, Trachea-esophageal, Renal, Limb anomalies*) syndrome [4]. Malformations in LCVS occur due to single somatic mutation occurring during 3-5 weeks of gestation [3]. During this gestational period neurulation occurs hence LCVS involves spinal cord malformations along with other anomalies [5]. Management of LCVS involves thorough evaluation with multidisciplinary approach in correction of malformations and regular follow up.

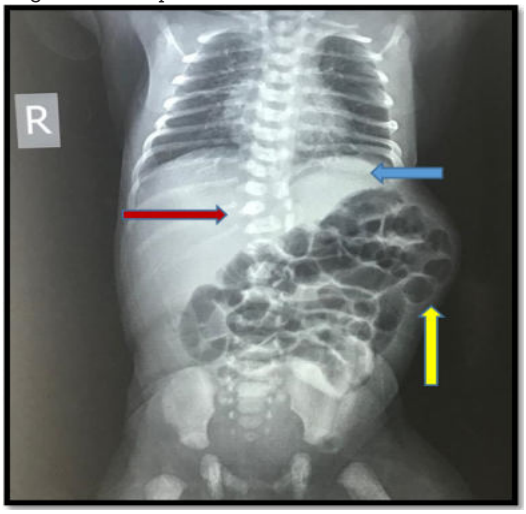

Fig 1 -Roentgenogram showing dysplastic 9th, 10th, 11th, 12th thoracic vertebrae (Fig 1 *red arrow*) with absent left 9th, 10 th, 11th, 12th ribs (Fig 1 *blue arrow*) and left lumbar hernia (Fig 1 *yellow arrow*).

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