LATISSIMUS DORSI FLAP TO REPAIR A RECURRENT EVENTRATION OF THE DIAPHRAGM: A NOVEL TECHNIQUE

Background Eventration of the diaphragm is a rare congenital anomaly characterized by an abnormal elevation of a part or whole of the hemidiaphragm. Surgical repair is indicated in symptomatic patients and the care should always be taken to overcorrect to prevent a recurrence. As the eventrated part of the diaphragm is diffusely replaced by fibroelastic tissue, there is a high tendency to recur even after the repair of eventration. The literature on the recurrence of eventration and its repair is scarce. Here, we report a case of recurrent eventration of the diaphragm in an infant managed by latissimus dorsi flap.

Methods An 11-month-old female infant with a past history of surgery for left-sided eventration of the diaphragm presented with recurrent lower respiratory tract infections. On examination, she was active, alert, and pink. Her heart rate was 110 beats a minute, respiratory rate was 52 breaths per minute, and the oxygen saturation was 91% in room air. Air entry was reduced over the left lung areas. An abdominal examination was normal, except for a left subcostal scar. Plain X-ray chest showed a recurrence of eventration (figure 1A). An upper gastrointestinal contrast study revealed the stomach and splenic flexure occupying the eventration and no evidence of gastro-oesophageal reflux (figure 1B). She was planned for plication repair with latissimus dorsi flap reinforcement.

Results Intraoperatively, a left-sided latissimus dorsi flap was identified, dissected, and safeguarded (figure 1C). Thoracotomy was done in the 5th intercostal space. The eventrated diaphragm was plicated (figure 1D) and reinforced with left latissimus dorsi flap (figure 1E).

The follow-up was uneventful. She was thriving well at two years follow-up. To the best of our knowledge, this is the first case where latissimus dorsi flap has been used as dynamic recruitment between the thoracic and the abdominal cavity for managing recurrent diaphragmatic eventration.

Conclusions The latissimus dorsi flap reinforcement is a novel and reliable technique to treat recurrent eventration of the diaphragm. The inherent motor tone of latissimus dorsi resists the intraabdominal pressure and prevents the recurrence of diaphragmatic eventration.

FACTORS ASSOCIATED WITH FAILED NON-OPERATIVE REDUCTION OF INTUSSUSCEPTION IN CHILDREN

Background The non-operative method of reduction is the gold standard treatment for intussusception in children. The successful non-operative reduction of intussusception carries less morbidity and mortality, but the literature on the risk factors for failed intussusception reduction is scarce. Hence a study was conducted to evaluate the factors associated with the failure of non-operative reduction of intussusception in children.

Methods A retrospective study was conducted in a Paediatric Surgery hospital, which included children admitted with intussusception between November 2013 and February 2020.

Results A total of 106 (67%) children underwent pneumatic reduction. Eighty-nine (84%) children had a successful