P150 UTILISATION OF OVINE REINFORCED TISSUE MATRIX IN PAEDIATRIC RECONSTRUCTIVE SURGERY

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Aim: Abdominal and thoracic reconstructive surgery has always been an aspect of surgical care in children for conditions such as congenital abdominal wall defects, large hiatus herniae, incisional herniae and chest wall defects following tumour surgery. Biosynthetic matrices are ideal for reconstructive surgery in the paediatric population as consideration needs to be given to future growth and potential need for reoperation. Moreover, the use of synthetic materials in this setting is known to be associated with long term issues.

We present the results of our experience with ovine reinforced tissue matrix in paediatric reconstructive surgery.

Material and Methods: All patients who underwent an operation at our institution using the biosynthetic matrix from March 2019 to April 2021 were identified retrospectively by searching theatre databases. Patient demographics, diagnoses and case notes were reviewed.

Results: The biosynthetic matrix was used in 26 children, (15 male and 11 female). Median age at insertion was 5.1 years (2.1 – 7.1 years). Median weight at insertion was 14.0kg (11.3 – 28.1kg). Patients had a history of hiatus hernia (n = 10), esophageal (n = 6), emergency laparotomy (n = 3), congenital diaphragmatic hernia (n = 2) sternal sarcoma (n = 1), rib sarcoma (n = 1), gastrochisis (n = 1), recurrent umbilical hernia (n = 1) and direct inguinal hernia (n = 1).

There were no hernial recurrences. There was a surgical site occurrence (SSO) in 12% - skin dehiscence (n = 2) and wound infection (n = 1). Median length of follow up was 7.9 months (4.5-9.0 months).

Conclusions: Our series demonstrates that ovine biosynthetic matrices can be used safely in paediatric reconstructive surgery with excellent outcomes and a very low rate of SSO.

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