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An effective alternative for abdominal wall closure following liver transplantation: adapting an adult surgical technique to a pediatric population

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INTRODUCTION

- Abdominal wall closure in liver transplant recipients presents a surgical challenge, often due to graft size discrepancies or the number of surgical interventions these patients undergo.
- We present a case series from our center involving the placement of Poli-4-hydroxybutirate (P4HB) reabsorbable mesh in the sublay position for abdominal wall closure.

MATERIALS AND METHODS

- Retrospective review
- Patients with liver transplantation between 2017-2024 with abdominal wall closure using th "sublay" technique with P4HB mesh
- Variables analyzed:
  - Age, sex, time to definitivo closure, complications and follow-up period.

RESULTS

Sex	74% female 26% male
Age	36 months ± 37.44 SD (range: 5–132 months)
Time to definitive clouser	12 days ± 14.75 SD (range: 3–41 days)
Follow-up period	60 months ± 30.89 SD (range: 6–130 months)

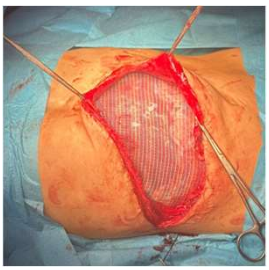
Closure with sublay technique in pediatric liver transplantation (15)

Sublay technique for a primary closure (7)

Sublay technique in transplant patients with incisional hernia following previous repair methods (8)

- Polypropylene mesh (4)
- Vycril mesh (2)
- En bloc closure (2)

IMAGES



After surgery and asymptomatic after 14 months

CONCLUSIONS

★ In our experience, the sublay technique using P4HB mesh is considered effective in the treatment of incisional hernias in pediatric transplant patients.

★ We have not observed any postoperative complications or recurrence of incisional hernia during the follow-up period.

★ An advantage over other meshes is that it can be in direct contact with intestinal loops and is fully resorbable, making it suitable for use in other surgeries involving compromised spaces.