8th WORLD CONGRESS of PEDIATRIC SURGERY
WOFAPS
12-15 November 2025
Titanic Mardan Palace Hotel
ANTALYA, TÜRKİYE

SURGICAL TREATMENT OF RECTAL PROLAPSE IN CHILDREM WITH ANORECTAL MALFORMATION

Igor Khvorostov [1,3], Evgeniy Okulov [2], Aleksey Dotsenko [2], Aleksey Gusev [2]
[1] *Sreransky Children Hospital, Moscow, Russia*
[2] *National Medical Research Center for Children's Health Federal state autonomous institution of the Russian Federation Ministry of Health, Moscow, Russia*
[3] *Veltischev Research and Clinical Institute for Pediatrics and Pediatric Surgery of the Pirogov Russian National Research Medical University, Moscow, Russia*

BACKGROUND

The incidence of rectal prolapse (RP)ranges from 3.8% to 60% and is considered an expected postoperative complication after treatment of some types of anorectal malformations (AM).
The causes of RP in children with AM may be technical errors in performing both primary and repeated surgeries aimed at improving the appearance of the perineum or the function of anal continence, concomitant anatomical defects of the levator muscles, spine and spinal cord.

Aims of the study

To evaluate the effectiveness a modified Delorme technique of transanal rectal musculectomy and muscle implication (TMMP) previously operated for anorectal malformations

METHODS

45 RP cases (33 boys and 22 girls).
The case histories of 234 patients who had previously undergone surgery for anorectal malformations were retrospectively analyzed.
The average values of the studied quantitative parameters were described using the arithmetic mean (M), the standard deviation (SD), as well as the minimum (min) and maximum (max) values, the confidence interval (CI) and the representation of quartiles (Q1; Q3)
SPSS v. 17 statistical package (SPSS Inc., Chicago, Illinois).

RESULTS

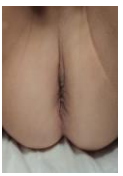
View of the perineum of a patient with rectal prolapse before surgery

Circular sutures on the intestinal mucosa at a distance of 0.5 cm from the mucocutaneous junction.

Circular sutures on the intestinal mucosa at a distance of 0.5 cm from the mucocutaneous junction.

Application of gathering sutures to the muscular sheat

View of the mucosal-mucosal anastomosis



Perineal view of a patient with rectal prolapse 6 months after surgery

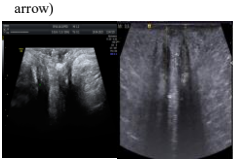
Independent defecation was restored on average in 3.8 days (Q1 – 2.2, Q3 – 2.8; SD – 1.6; min/max – 2.0–6.0; 95% CI: 2.1–5.5).
With an average observation period of up to 7.6 months after surgery (Q1 – 5.0, Q3 – 10.9; SD – 2.4; min/max – 5.0–11; 95% CI: 5.1–10.2), there were no recurrences of RP or anastomotic stenosis
On the 10th postoperative day, calibration bougienage was performed under general anesthesia – in all cases, the age-related bougienage passed freely.
Patients were discharged from the department on the 11th day after surgery.
Prophylactic bougienage was not performed in the postoperative period.

GRAPHICAL IMAGE OR PICTURE FILE

View of the patient's perineum after the application of a mucosal-mucosal anastomosis and after 6 months after surgery

View of the patient's perineum after the application of a mucosal-mucosal anastomosis and after 12 months after surgery

Ultrasound after surgery. Formed cuff after surgery (thin arrows), lumen of muscle plication (blue arrow)



During observation after surgery for 1.5 years, no recurrences of RP and anastomotic stenosis were detected (Q1 – 5.0, Q3 – 10.9; SD – 2.4; min/max – 5.0–11; 95% CI: 5.1–10.2).

CONCLUSIONS

The advantage of the proposed technology can be considered its effectiveness in circular RP good results makeup, absence of complications in the form of anastomotic failure, stenosis and recurrence RP during observation for 12 months after surgery.