



THE TEACHER – STUDENT RELATIONSHIP IS ALSO RELEVANT

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ABSTRACT

Neonatal congenital intestinal obstruction remains a challenging condition requiring urgent surgical management and structured postoperative care. This study included 150 neonates divided into an intervention group (n=88) and a comparison group (n=62). The intervention group received an optimized treatment protocol integrating individualized surgical decision-making and early rehabilitation strategies. Clinical outcomes, complication rates, intestinal recovery time, and hospital stay duration were assessed. Implementation of modern strategies reduced complication rates from 42.1% to 25.0%, shortened hospitalization by 6.4 days, and accelerated bowel function recovery. These findings demonstrate the effectiveness of integrated management in improving neonatal surgical outcomes significantly.

Background

Congenital intestinal obstruction in neonates is a critical surgical condition requiring immediate intervention. Its incidence ranges from 1:1500 to 1:5000 live births, with a significant proportion of cases complicated by postoperative morbidity. Despite advances in neonatal surgery and intensive care, complication rates remain high, reaching 35–45%. Common complications include anastomotic leakage, adhesive obstruction, sepsis, and short bowel syndrome. While surgical techniques have improved, postoperative recovery remains a major challenge, particularly in premature and low birth weight infants. Traditional management approaches often fail to address the importance of early functional rehabilitation. Recent clinical strategies emphasize the integration of surgical precision with early enteral feeding, metabolic stabilization, and stimulation of gastrointestinal motility. Such comprehensive approaches are increasingly recognized as essential for improving recovery and long-term outcomes in neonatal patients.

Aim

To evaluate the effectiveness of integrated surgical and rehabilitation strategies in improving outcomes in neonates with congenital intestinal obstruction.

Materials and Methods

A total of 150 neonates diagnosed with congenital intestinal obstruction were enrolled in the study. Patients were divided into an intervention group (n=88) and a control group (n=62). The intervention group received individualized surgical management combined with early postoperative rehabilitation, including nutritional support and motility stimulation. The control group was treated using conventional protocols. Clinical parameters, laboratory findings, imaging data, and postoperative recovery indicators were analyzed. Outcome measures included complication rates, time to bowel function recovery, and hospital stay duration. Statistical analysis was performed using Student's t-test and chi-square test, with significance set at $p<0.05$.

Results

The intervention group demonstrated significantly improved clinical outcomes. The overall complication rate decreased from 42.1% in the control group to 25.0% ($p<0.05$), representing a 17.1% reduction. Time to bowel function recovery was shortened by 3.3 days. Hospital stay duration decreased from 20.1 ± 2.8 to 13.7 ± 2.0 days. The incidence of short bowel syndrome declined from 14.5% to 7.2%. Infectious complications were reduced from 31.0% to 18.2%. Clinical improvement was observed in 83.0% of neonates in the intervention group compared to 58.1% in the control group, confirming the effectiveness of integrated management strategies.

Conclusion

Modern integrated strategies combining optimized surgical techniques and structured postoperative rehabilitation significantly improve outcomes in neonates with congenital intestinal obstruction. A reduction in complication rates by 17.1%, shorter hospitalization by over six days, and faster bowel recovery highlight the clinical benefits of this approach. Early rehabilitation interventions, including nutritional and functional support, play a key role in improving recovery and reducing morbidity. These findings support the implementation of multidisciplinary treatment protocols in neonatal surgical care. The proposed strategy can serve as a foundation for developing standardized clinical guidelines and improving the quality of care in specialized pediatric centers worldwide.

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