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Case Report

JEJUNAL ATRESIA IN PRETERM, LBW WITH CLINICAL DIAGNOSIS OF DOWN SYNDROME UNDERGOING PA WITHOUT NICU AND UNEVENTFUL RECOVERY

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Abstract:

Jejunal atresia is a rare congenital obstruction of the small intestine that necessitates prompt surgical intervention. This paper describes the successful primary anastomosis procedure for jejunal atresia in an 8-month-old premature, preterm, low birth weight baby with a clinical diagnosis of Down syndrome. Interestingly, the patient recovered without incident and did not require support in the neonatal intensive care unit (NICU). In a setting with limited resources, this case demonstrates the viability of treating jejunal atresia with primary anastomosis and emphasizes the criticality of prompt surgical intervention and attentive postoperative care for the best possible results.

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Introduction:

Jejunal atresia is a rare congenital obstruction of the small intestine that often requires prompt surgical intervention.[1] Congenital anomalies with Down syndrome rank as the world's fifth most common cause of death for children under five. Without prompt access to neonatal surgical therapy, many gastrointestinal congenital abnormalities are deadly.[2] This is an infrequent association of jejunal atresia with phenotypic features of Down syndrome.[3] This report discusses a unique case of an 8-month-old premature, preterm, low birth weight infant with a clinical diagnosis of Down syndrome who underwent primary anastomosis for jejunal atresia without requiring neonatal intensive care unit (NICU) support and experienced an uneventful recovery.

Case presentation:

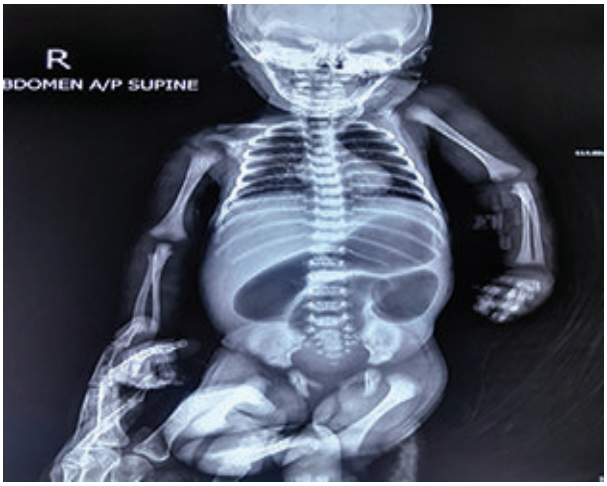
Patient: An 8-month-old female neonate.
Gestational Age: Born at 32 weeks gestation.
Birth Weight: 1500 grams (Low Birth Weight).
Associated Conditions: Clinical diagnosis of Down syndrome based on phenotypic features.

Presentation: The Neonate presented with bilious vomiting, scaphoid abdomen, and failure to pass meconium within the first 3 days of life

Diagnostic workup:

Imaging: (Figure 1)

X-ray abdomen:



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Abdominal X-ray showed multiple dilated loops of small intestine with absent lower abdominal gas shadow and suggestive of proximal jejunal atresia.

Laboratory Findings: Routine blood tests were within normal limits except serum bilirubin was high on 3rd day of life.

Surgical intervention:

Procedure:

The infant underwent exploratory laparotomy on the second day of life. Intraoperative findings included Type IIIa jejunal atresia with a significantly dilated proximal segment and a collapsed distal segment.

Anastomosis:

- The atretic segment was resected.

Primary end-to-side anastomosis was performed using interrupted absorbable sutures.

Findings : proximal atretic jejunum was dilated and distal atretic segment was micro colon (huge discrepancy)

Postoperative Care:

- The infant did not require NICU care and was managed in a regular pediatric surgical ward. Antibiotic therapy was administered prophylactically. Intravenous fluids and parenteral nutrition were initiated.

Enteral Feeding: Gradual introduction of enteral feeds was started on postoperative day 5 once bowel sounds returned. The infant tolerated feeds well, with progressive advancement to full enteral nutrition

Outcome and follow-up:

Recovery: The postoperative period was uneventful. The neonate showed no signs of infection or anastomotic complications. Full enteral feeds were achieved by postoperative day 07.

Growth and Development:

The infant's growth was monitored regularly, and satisfactory weight gain was observed.

Follow-up:

Follow-up visits at 15 days, 1 month, 2 months post-surgery showed no complications related to the anastomosis. The infant continued to thrive, with no further gastrointestinal issues

Discussion:

In newborns, intestinal blockage is caused by the relatively frequent defect known as small intestinal atresia. Even while surgical procedures are generally effective, serious issues may arise in some circumstances.[4,5] It might be difficult to treat jejunal atresia in low birth weight, newborn babies with Down syndrome. This case shows that even without NICU support, favorable outcomes can be obtained with appropriate surgical and postoperative care. Primary anastomosis is an acceptable option, and the baby's smooth recovery emphasizes how crucial prompt intervention and careful postoperative care are.

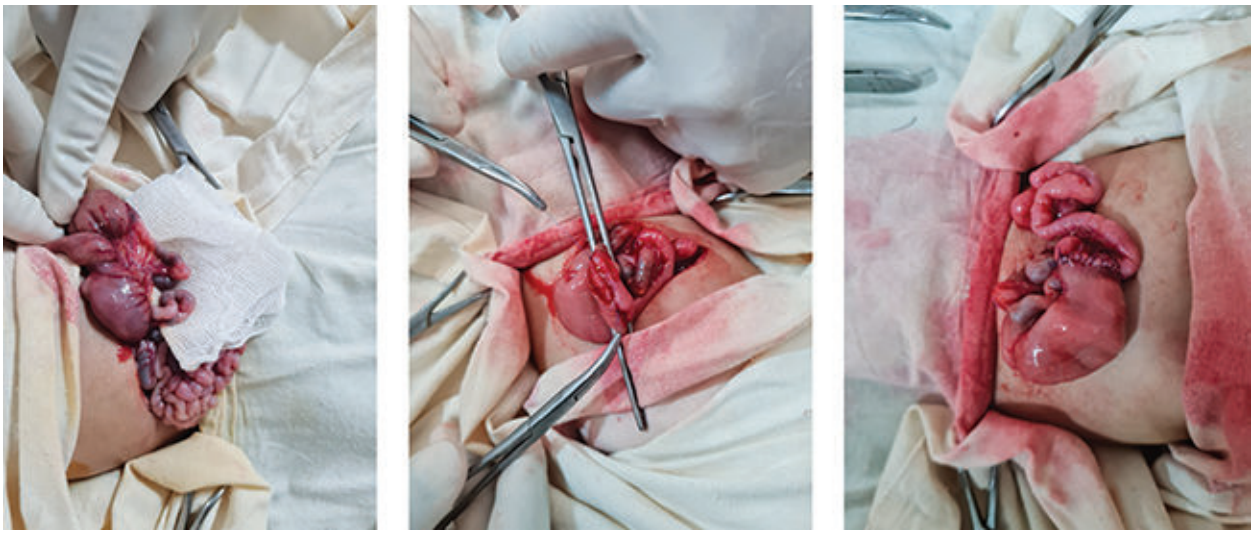

Figure 1,2,3: *Jejunal atresia; 2 atretic end open; End to side jejunojejunal primary anastomosis*

Conclusion:

This case reveals the possibility of effective primary anastomosis in the treatment of jejunal atresia in underweight, preterm newborns diagnosed with Down syndrome. The fact that the recovery process proceeded uninterrupted in the absence of NICU support suggests that positive results are achievable with the right surgery and medical attention.

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