

## IMPACT OF COLORECTAL SPECIALIST NURSE SERVICE ON THE CLINICAL COURSE OF HIRSCHSPRUNG'S DISEASE - A DECADE OF CHANGE

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**Introduction:** Recurrent enterocolitis and anastomotic stricture are common sources of morbidity in Hirschsprung's disease (HSCR) which can be prevented with good quality rectal irrigations and anal dilatations. We aimed to evaluate if the introduction of a colorectal clinical nurse specialist service has led to improvement in pre- and post-operative clinical outcomes.

**Methods:** A retrospective study was performed comparing outcomes (hospital admission for enterocolitis, levelling/diverting stoma formation due to enterocolitis or failure of washouts, anastomotic stricture requiring dilatation under general anaesthetic) in patients who underwent pull-through operation for HSCR in the year prior to the establishment of the colorectal specialist nursing service (Group A, 2006) and 9 years following its introduction (Group B, 2015).

**Results:** We evaluated data pertaining to 24 patients for both one year intervals (Group A n=12; Group B n=12). Eighteen patients (75%) were male. The median age at pull-through was 5.2 months (1 month - 12.2 months). Fewer levelling/diverting stomas were performed in Group B (30.8%) compared to Group A (69.2%,  $p=0.041$ ). The total number of unplanned inpatient bed-days prior to pull-through surgery fell substantially from 70 in Group A to 32 in Group B. There was no difference between the 2 groups regarding the level of the histological transition zone ( $p=0.147$ ) or the incidence of trisomy 21 ( $p=0.64$ ). There was no difference in the number of admissions for post-operative enterocolitis ( $p=0.56$ ) or the incidence of anastomotic stricture requiring dilatation under general anaesthesia ( $p=1$ ).

**Conclusion:** The significant reduction in unplanned hospital bed days and stoma formation procedures observed since the introduction of a colorectal clinical nurse specialist service represents a considerable reduction in resource utilization and is likely attributable to better parental education and follow-up resulting in improved bowel management prior to pull-through surgery for Hirschsprung's disease.