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NOTHING IS PERMANENT: REVERSAL OF THE MACE PROCEDURE

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Aim of the Study: The Malone Antegrade Continence Enema (MACE) procedure is an established treatment option for children with faecal incontinence secondary to chronic idiopathic constipation (CIC) and those who have faecal incontinence following pull-through for anorectal malformations (ARM) and Hirschsprung's disease (HD).
It is perceived as a permanent procedure by patients and carers, with the majority of reversals reported to be secondary to complications, lack of effectiveness or non-compliance.
This single-centre retrospective study analyses MACE procedure reversals following the return of normal bowel habits in children with CIC, ARM and HD.

Methods: Children who underwent a MACE procedure in our unit between 1998 and 2015 were identified. Demographic and clinical data were obtained from contemporaneous records. Indications for MACE formation, age at MACE formation and reversal, and indications for reversal were analysed. Data are given as a percentage or mean (range).

Main Results: Over the 18-year study period, 47 children underwent MACE procedure. Underlying diagnoses were CIC (21; 45%), ARM (16; 34%) and HD (10; 21%). Age at time of surgery was 9.4 (3-19) years and follow-up time was 5.7 (0.3-10.8) years.

Eighteen MACE procedures (38%) were reversed; 2 (4%) due to stomal non-efficacy, 5 (11%) due to stomal complications and 11 (23%) secondary to development of independent continence. In this latter group of 11, underlying diagnoses were CIC (4; 36%), ARM (1; 9%) and HD (6; 55%). Age at MACE formation was 9.9 (4-14) years, age at reversal was 17.8 (13-22) years and period with the MACE was 8.0 (2-13) years.

Conclusion: We found a significant proportion of patients did not need their MACE after prolonged use. This counters the perception that a MACE is always for life and provides encouragement that development of independent continence in patients with CIC, HD and ARM may be a possible indication for reversal of the procedure.