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CONFERENCE ABSTRACTS

ABSTRACTS: Transition of Care Colorectal Conference

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FREQUENCY AND SEVERITY OF DIAPER DERMATITIS IN CHILDREN FOLLOWING STOMA CLOSURE

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Background: Diaper dermatitis is an inflammatory skin condition which presents with erythema, papules, and pustules in the diaper area causing pain, parental anxiety, cost, and potential delay in surgical interventions that involve incisions in the areas of the rash.

Method: We are planning a randomised controlled trial (RCT) to determine if applying stool to the perianal area prior to ostomy closure decreases the incidence of diaper dermatitis. Prior to our IRB application, we performed a historical chart review of our patient cohort (IRB Pro00016402: Colorectal Patient Registry) to assess the frequency and severity of diaper dermatitis after ostomy closure in children. The severity of diaper dermatitis was graded as none, mild, moderate, and severe. Our routine treatment included zinc oxide for mild dermatitis, triple paste (zinc oxide, cholestyramine, and nystatin) for moderate dermatitis and Marathon or Cavilon for severe dermatitis. None of these patients received the proposed therapeutic intervention we intend to study.

Results: Twenty-eight children (age from five months to eight years, median age of 11 months) undergoing an ostomy closure between July 2023 and December 2023 were reviewed. The original surgery included a primary posterior sagittal anorectoplasty (PSARP) in 19, a Pull-Through in seven (six for HD, one with colonic atresia), and a posterior sagittal anorectal vaginal urethroplasty (PSARVUP) in two. Twenty-three had a colostomy closure and five an ileostomy closure. To prevent constipation, 17 were discharged after their stoma closure on Senna and MiraLAX, or MiraLAX alone. To treat hypermotility, three were discharged on fibre and/or loperamide. Two patients had a Malone appendicostomy and received postoperative antegrade flushes.

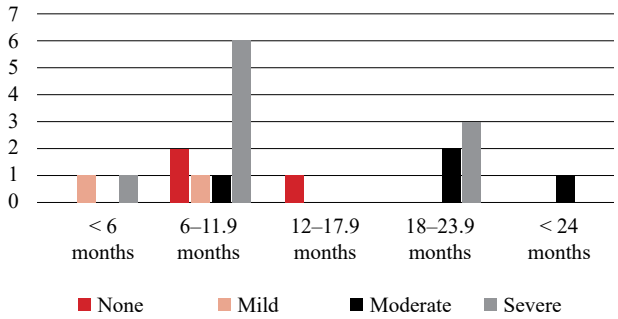

Table I.0: Age and severity of dermatitis

Nineteen had a diaper management plan documented at their follow-up visit: 10 (35%) had severe dermatitis, four (14%) moderate dermatitis, two (7%) mild dermatitis, and three (10%) no dermatitis. Severe dermatitis was only seen in children 24 months and younger, all of whom were in diapers (Table I.0).

Conclusion: Diaper dermatitis affected more than half of patients after a stoma closure. Based on documentation of the severity of this problem, we plan to develop a RCT to study the impact of applying stool to the perianal area in advance of ostomy closure to see its effect on post-stoma closure dermatitis. We aim to compare rates in the two arms of the study and to our current routine treatment protocol.

INCLUSION OF A PELVIC FLOOR PHYSICAL THERAPY PROGRAMME IN A COLORECTAL CENTRE TO PROMOTE OPTIMAL INDEPENDENCE AND CONTINENCE THROUGH A PATIENT'S LIFESPAN

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Background: Pelvic floor physical therapy (PFPT) embedded within a colorectal programme can facilitate PFPT evaluations in tandem with colorectal clinic visits to collaboratively optimise plans of care.

Objective: With integration of PFPT into a colorectal centre, non-invasive PFPT assessments and treatments can accompany colorectal surgical evaluations. PFPT can provide data from surface electromyography and retraining of the pelvic floor muscles to gauge the amenability of pelvic floor dyssynergia to conservative measures, which can influence the choice of interventions. The purpose of this study is to assess the role of PFPT within a colorectal programme.

Methods: A physical therapist with expertise in PFPT was integrated into a colorectal programme and the impact of this collaboration was assessed.

Results: The introduction of PFPT within a colorectal programme was proactively tracked. In the first four months, 192 PFPT visits occurred (74 consultations, 64 evaluations, 55 follow-ups). One hundred and eighteen PFPT visits were during multidisciplinary clinic days (77 in a collaborative clinic, 30 in a bowel management clinic, 11 in an APP clinic), 73 in an outpatient clinic setting, and one in a pre-op bay. Diagnoses of the 64 patients that completed PFPT evaluations included 17 with anorectal malformations, three with cloacal malformations, 17 with functional constipation, 19 with Hirschsprung's disease, three with VACTERL, and five with pelvic pain. PFPT included an external pelvic examination and pelvic floor muscle coordination for 48 patients, biofeedback to enhance coordination for 21, perianal electrical stimulation for 22 patients to fatigue and/or engage the pelvic floor muscles, and abdominal electrical stimulation with 24 patients to improve bowel motility. Two patients had planned botox cancelled when PFPT demonstrated improvement in pelvic floor dyssynergia. Twenty-six patients on antegrade flushes had PFPT to initiate learning to have voluntary bowel movements.

Conclusion: We hypothesise that integrating PFPT into the colorectal team is valuable to the success of patients to achieve and maintain continence, independence, and autonomy in their care, while further optimising the multidisciplinary care that colorectal patients require. Future work aims to objectively assess the clinical impact of such a programme as an adjunct to care of the colorectal patient.

HYBRID TRANSITION OF CARE FOR COLORECTAL CONDITIONS: TOWARDS A MORE ETHICAL APPROACH

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Keywords: Transitional care, hollow visceral myopathy, Hirschpsrung's disease, anorectal malformation, teenage, ethics

Background: The South African state-sector hospital-based model of care mandates transfer from paediatric to adult-based services at 13 years of age. Adult care promotes a shift from parental to patient autonomy and offers additional niche services, but cannot always provide the comprehensive multidisciplinary support provided in a paediatric setting, posing challenges for quality continuity of care from free-standing paediatric institutions.

Materials and methods: Three scenarios of congenital colorectal conditions affected by disparate service provision between adult and paediatric services are discussed to highlight dilemmas around transfer to adult services in South Africa while balancing ethical principles of beneficence, non-maleficence, autonomy and justice.

Results:

Case 1: Hollow visceral myopathy. Lack of home-based parenteral nutrition services, poor integration between adult and paediatric palliative care, and age-based hospital admission policies affect quality of life and patient autonomy.

Case 2: Complicated Hirschsprung's disease. Lack of familiarity with Hirschsprung's-associated enterocolitis, obstructive symptoms, inflammatory bowel disease-like features and antegrade continence procedures in peripheral and adult-focused hospital settings affect quality of life and equitable access to care. Adult pelvic floor therapy services and decentralisation of stoma-related services benefit certain patients.

Case 3: Anorectal malformation with VACTERL association. Congenital cardiac disease, bowel, bladder, renal and hand conditions have specialist clinics focused on paediatric requirements. Fragmented, generalised care for these conditions in an adult setting may lead to impaired follow-up. Social challenges including hampered care dependency grant provision may be exacerbated in the adult care setting, leading to impaired access of services.

Conclusion: A hybridised transfer method of colorectal care transfer, whereby both adult and paediatric services are accessed simultaneously for various components of care, should be dictated by specific patient needs rather than hospital age-based criteria. Disparities exist regarding parenteral nutrition, palliative care, psychological support services, and financial distribution of resources across age-related healthcare platforms, creating ethical dilemmas. Creation of dedicated teenage wards within adult facilities will improve quality of life for many patients facing life-long challenges from congenital colorectal disease.

YEAR ONE OF AN ADULT COLORECTAL TRANSITION PROGRAMME: DATA AND DESCRIPTION

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Background: Adult care of paediatric colorectal disease can be challenging due to a lack of understanding of paediatric conditions by adult providers, an absence of

multidisciplinary collaboration, and the unknown needs of these patients as they age. Our programme has initiated a uniquely designed Colorectal Transition Program (CTP) to overcome these deficits.

Objectives: We seek to describe the implementation of an integrated paediatric and adult colorectal care programme after its first year including demographic, patient characteristics and diagnostic planning. We will also describe the initial build and the streamlined processes of the CTP.

Methods: Information and data were prospectively and retrospectively collected via chart review using The Colorectal Patient Registry (IRB Pro00016402: Colorectal Patient Registry). We reviewed data from the first 53 patients in the CTP from March 2023 to June 2024 including demographic data, age at time of presentation, geographic area of residence and diagnosis.

Results: Patient inquiries are first processed into an intake by the paediatric team consisting of a programme coordinator and nurse then presented in a multidisciplinary forum weekly. This intake is passed to the adult CTP which consists of a surgeon boarded in paediatric surgery and adult colorectal surgery, a programme coordinator/nurse, scheduler, reconstructive urologist, paediatric adolescent and adult gynaecologist along with a urogynaecologist and maternal foetal medicine physician. The CTP then arranges for tests, imaging, visits, and operations at a partnering adult facility. In our initial year, we had 53 inquiries, 24 (45%) resided within a 50-mile radius of our programme, 23 (43%) > 50-mile radius, and five (10%) international patients. Forty-two per cent (N = 22) of the patients were between 25–35 years old with those under 25 (n = 16) (30%) making up the next highest age group (Table I). Of the diagnoses, anorectal malformation (ARM) including three complex cloacas with bowel neo-vaginas (n = 24) and spina bifida (n = 10) were the most common (Table II). Most reported faecal incontinence (FI) as their primary reason for consultation with hope for better quality of life.

Conclusion: There is a need for care of patients with congenital colorectal conditions in early adulthood. The majority of patients had ARM, FI, and were within a 50-mile radius. It appears that sparsity of knowledgeable adult providers is a major barrier to a geographically diverse patient population seeking this specialised care. Transition of care to adulthood discussions should begin early in life with help from paediatric centres to find and establish this care. Future studies will include programmatic improvements and development of a detailed plan for transition.

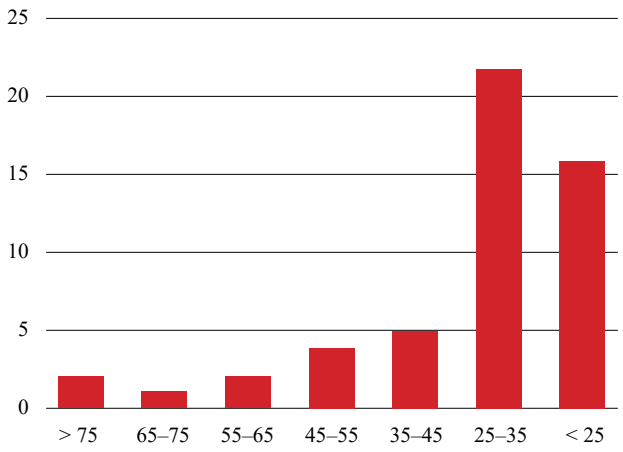

Table I: Age at inquiry

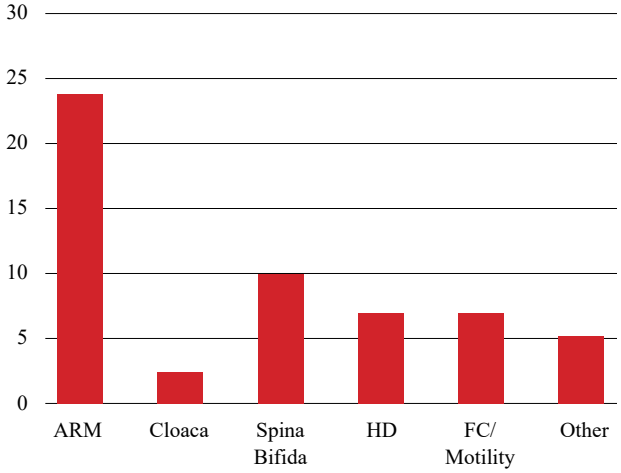

Table II: Intake diagnosis

ANORECTAL MALFORMATIONS AND BOWEL OUTCOMES: A COMPARISON BETWEEN A REFERRAL CENTRE BASED IN A HIGH INCOME COUNTRY AND ONE BASED IN A LOW-MIDDLE INCOME COUNTRY

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Background: To compare bowel function outcomes between patients that underwent posterior sagittal anorectoplasty (PSARP) for anorectal malformations (ARMs) followed up at IRCCS Ca' Granda Ospedale Maggiore Policlinico in Milan (Italy) and Chris Hani Baragwanath's Paediatric Colorectal Clinic (JPCC) in Johannesburg (South Africa).

Material and methods: The study was conducted by the same authors in Milan and in Johannesburg between 2020 and 2024. Bowel function was scored using Krickenbeck (score 1–7), Rintala (0–20), and Baylor continence scale (CS) (2–84) questionnaires, filled in by patient's caregivers. Results were categorised according to the Krickenbeck classification. Patients younger than three years of age, with developmental delay or incomplete questionnaires were excluded.

Results: Sixty-nine patients were included from Milan (55% females), median age 9.2 years (range 3.3–31.1), and 64 from JPCC (53% females), median age 5.1 (range 3.0–28.6). Types of ARMs were comparable, except for perineal fistulas, more common in Milan population (31 vs 9, $p = 0.0001$). Age of diaper removal was significantly lower in Milan group (33.5 months vs 45.9, $p = 0.001$). Amongst patients on treatment, 8 (15%) from Milan were on diet versus 4 (10%) at JPCC ($p = 0.5$), 20 (38%) versus 13 (32%) were on laxatives ($p = 0.6$), 11 (21%) versus 24 (59%) were on enemas ($p = 0.0002$). Thirteen (25%) patients from Milan were both on laxatives and washout. Following Krickenbeck's criteria, 24 (35%) patients from Milan and 15 (23%) from JPCC ($p = 0.15$) could be considered completely continent, as being capable of voluntary bowel movements and never experiencing soiling (Table I). According to Rintala's Score, 24 (35%) patients from Milan and 24 (38%) from JPCC showed an excellent bowel function, scoring from 18 to 20 ($p = 0.11$). According to Baylor CS results, 9 (13%) patients from Milan and 6 (9%) from JPCC presented urinary leakage during day and night at least once a week ($p = 0.44$).

Conclusion: A better score to Baylor CS arose in JPCC group, but results must be adjusted to patient's environment and caregivers' awareness. The perfect questionnaire to evaluate ARM patients still doesn't exist and more investigations must be performed to evaluate which variable mostly impacts the outcomes.

Table I: Krickenbeck's questionnaire results

	Milan	%	JPCC	%	*p*-value
Voluntary bowel movements	54	78%	59	92%	0.025
Never soiling	25	36%	17	27%	0.234
Completely continent	24	35%	15	23%	0.153
Constipation	45	65%	39	61%	0.623