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Complications associated with colostomies in patients with anorectal malformations: experience from a referral center in Colombia

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1. BACKGROUND

Initial management of anorectal malformation: Creation of colostomy in neonatal period. Reported in 12–22% of patients, delayed diagnosis

Complications: Rate: 30-80% Requires additional surgeries

Outcomes: 9,5% Increased morbidity Affects quality of life

2. METHODS

A descriptive retrospective case series

Anorectal malformations,who required colostomy

Fundación HOMI

January 1, 2008, and December 31, 2024

The institution does not provide obstetric services, all patients were referred from external centers

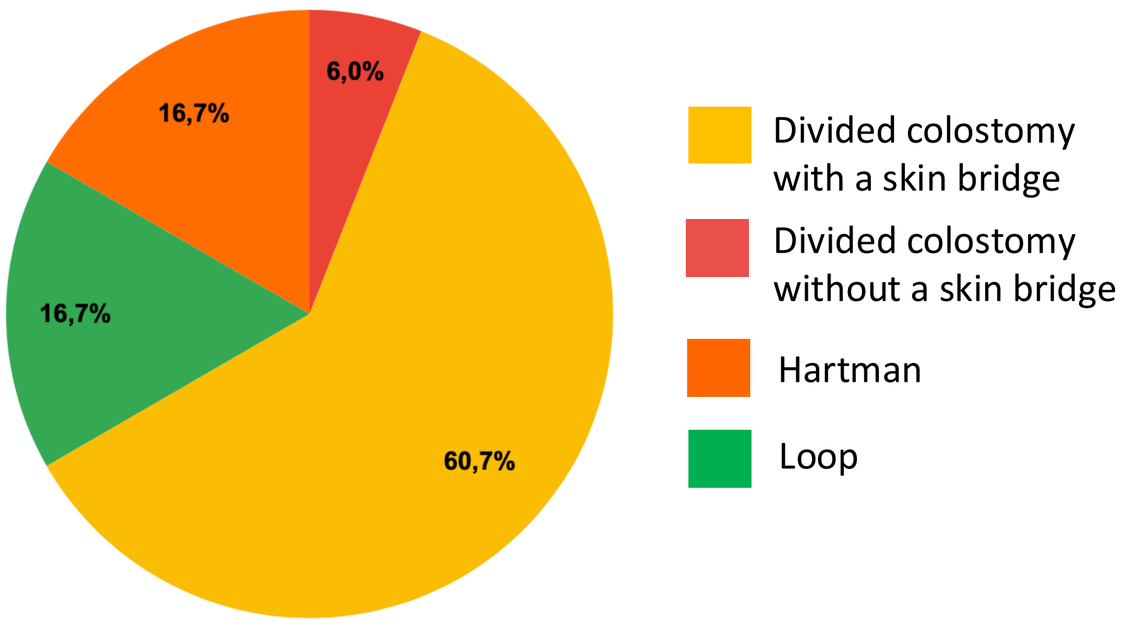
Quantitative variables: Measures of central tendency; chi-square test ($p<0.05$)
Qualitative variables: Frequencies

3.2 RESULTS

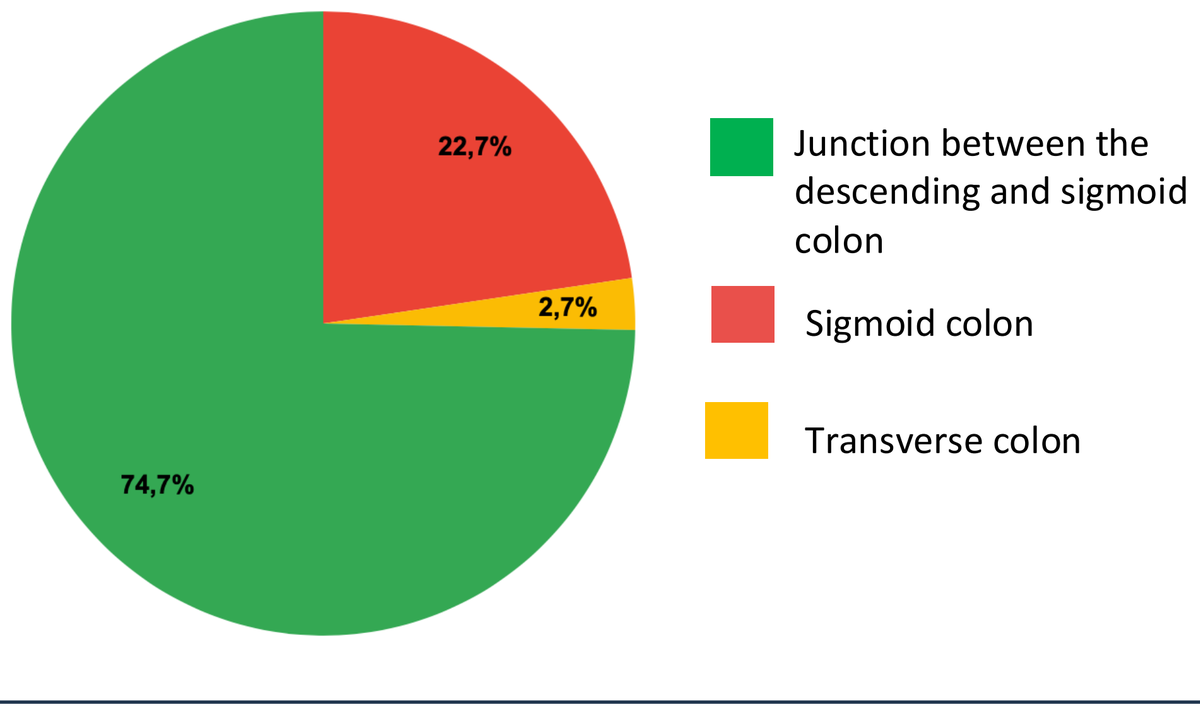
150 patients

Colostomy was performed at another institution in **77%** of cases

1. Type of colostomy:



2. Level of colostomy:



3.1. RESULTS

Table 1. Type of malformation

	Boys n(%)	Girls n(%)
Rectoperineal fistula	24 (16%)	12 (8%)
Vestibular fistula	-	34 (22,6%)
Vaginal fistula	-	5 (3,3%)
Recto bulbar urethral fistula	15 (10%)	-
Recto prostatic urethral fistula	13 (8,6%)	-
Imperforate anus without fistula	12 (8%)	5 (3,3%)
Rectovesical fistula	8 (5,3%)	-
Short common channel cloaca	-	14 (9,3%)
Long common channel cloaca	-	8 (5,3%)
Total	72 (48%)	78 (52%)

- **18,6% delayed diagnosis (23% constipation)**

3.3. RESULTS

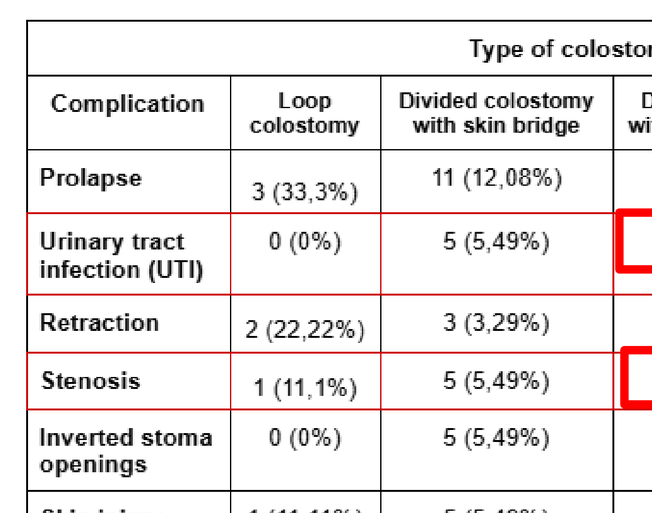
Table 2. Complications

Complication	Number of complications (%)
Wound-related complications (SSI – eventration – parastomal hernia – skin injury)	19 (28,5%)
Prolapse	18 (27%)
Stenosis	14 (21%)
Malpositioned stomas (inverted stoma openings – stoma placed too distally)	13 (19,5%)
Recurrent urinary tract infection (UTI)	13 (19,5%)
Stoma retraction	9 (13,5%)
Megarectum (incomplete diversion)	4 (6%)
Stoma necrosis	2 (3%)

Table 3. Bivariate analysis

	Type of colostomy				
Complication	Loop colostomy	Divided colostomy with skin bridge	Divided colostomy without a skin bridge	Hartman	p
Prolapse	3 (33,3%)	11 (12,08%)	4 (16%)	0 (0%)	0,053
Urinary tract infection (UTI)	0 (0%)	5 (5,49%)	7 (28%)	1 (4%)	0,002
Retraction	2 (22,22%)	3 (3,29%)	2 (8%)	2 (8%)	0,125
Stenosis	1 (11,1%)	5 (5,49%)	7 (28%)	1 (4%)	0,005
Inverted stoma openings	0 (0%)	5 (5,49%)	3 (12%)	0 (0%)	0,249
Skin injury	1 (11,11%)	5 (5,49%)	1 (4%)	0 (0%)	0,526
Total	6 (66,6%)	36 (39,5%)	13 (52%)	4 (16%)	0,017

Colostomies located in the **sigmoid and transverse colon**, as well as those performed at **outside institutions**, also showed a **higher number of complications**, **although these differences were not statistically significant**



Colostomy recommended:

Divided colostomy with a skin bridge

CONCLUSIONS

Most patients with anorectal malformations require a colostomy

Loop and divided colostomies without a skin bridge show higher complication rates, especially stenosis and UTI.

A divided colostomy with a skin bridge at the descending–sigmoid junction may reduce complications.

Further multicenter studies are needed to confirm and standardize techniques.

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References