

Pregnancy and Surgical Outcomes in Pregnant Patients with Stomas: A Retrospective Series

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Introduction

Over 42,000 Australians live with a stoma, and this number increases annually. Pregnancy in stoma patients is a rare but complex condition and there is limited published literature regarding surgical and obstetric complications in pregnant stoma patients.

Aims:

To review stoma outcomes, perinatal morbidity and mortality, and early postpartum period in pregnant stoma patients.

Methods

Ethical approval for the study was gained from the Royal Brisbane and Women’s Hospital Human Research Ethics Committee (EX/2023/MNHA/99838).

Data was retrospectively obtained on women of childbearing age, with a stoma, who had been pregnant and birthed in the last eight years at the Royal Brisbane and Women’s Hospital between **January 2014 to December 2022**. Data recorded included patient demographics, type of stoma, indication for stoma, need for additional abdominal surgeries, method of conception, pregnancy complications, length of stay, neonatal outcomes and post pregnancy stoma complications.

Results

- Of 42,842 births across 8 years, there were **16 births** from **13 mothers with stomas**.
- Indications for stoma included Crohn’s disease, ulcerative colitis, malignancy and slow colonic transit.
- Maternal demographics are described in Table 1.

Table 1: Patient Demographics

Indication for stoma	IBD	Non-IBD	p-Value
Total Patient Number (n)	7	6	
Mean Age at First Delivery (years)	33	29	0.10
Mean BMI at First Delivery (kg/m²)	23.8	24.1	0.54
Smoking within first 20 weeks (%)	1 (14.3%)	1 (16.7%)	1.00
Alcohol consumption during pregnancy (%)	1 (14.3%)	3 (50%)	0.12
Primiparous (n)	4	3	
Multiparous (n)	5	3	

Table 2: Maternal Outcomes

	IBD	Non-IBD	p-Value
Total Number of Births (n)	10	6	
Method of Conception			
Natural	6 (60%)	6 (100%)	
Assisted IVF	4 (40%)	0 (0%)	0.23
Method of Delivery			
Vaginal	1 (10%)	1 (16.7%)	0.75
Elective Caesarean	4(40%)	3 (50%)	
Emergency Caesarean	5(50%)	2 (33.3%)	
Mean length of stay (days)	3.9	5.8	0.21

Results

Maternal Outcomes (Table 2)

- Of 10 births to IBD patients, 40% experienced serious stomal complication.
- Caesarean section (CS) rate was 90% for IBD and 83% for non-IBD.
- IBD patients had higher rates of in-vitro fertilisation at 40% compared to 0%.
- Of 16 births, there were five complications (31.25%) associated with the stoma either during pregnancy or during the sixty-day postpartum period.

Neonatal Outcomes

- Average gestational age at delivery was 36 weeks IBD vs 35 weeks non-IBD. 40% of births in the IBD group were at less than 37 weeks, 50% in the non-IBD group.
- Neonates delivered to IBD mothers were more likely to have birth weight under 2500g.

Summary

Pregnancy in patients with stomas is associated with a high risk of stomal complications, lower gestational weight at delivery and high rates of premature delivery. IBD patients make up more than half of the patients with stomas delivering at a tertiary service and these complex patients would benefit from multi-disciplinary care during and after their pregnancy.

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