

SIX-MONTH-OUTCOME OF MYOMETRIAL RESTORATION SURGERY IN WOMEN WITH PLACENTA ACCRETA SPECTRUM

Omar Yousry Elshorbagy, MD, MRCOG, Mohammed Elmahdy Abdelmoniem, PHD, Amal Zaki Azzam, PHD, Mervat Sheikhelarab Elsedeeek, PHD

Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Alexandria, Alexandria, Egypt

OBJECTIVES

- ▶ The study aims to evaluate the outcome of myometrial defects closure in women diagnosed with placenta accreta spectrum (PAS) including maternal complications, puerperium blood loss, the menstrual cycle, and the incidence of the isthmocele.

METHODS

Study Design

- Prospective cohort study.
- ▶ The study was carried out in El-Shatby university hospital in Egypt on eighty-two patients, who were diagnosed by ultrasound with PAS, whose ages were between 20 to 40 years old, and who desired to conserve their uterus. Patients underwent elective uterine conservation surgery described as the closure of the myometrium defects after complete placental separation. Surgical diagnosis was done according to FIGO classification. The patient's puerperium and menstruation were evaluated. Transvaginal and trans-abdominal greyscale ultrasound was performed four months after the operation to evaluate the presence of the isthmocele and the myometrium thickness of the anterior and posterior uterine walls.

RESULTS

- ▶ Seventy-one patients were able to come for follow-up. Accreta, increta, and percreta were surgically diagnosed in 21 (29.57%), 29 (40.84%), and 21 (29.57%) patients, respectively. Puerperal blood loss was minimal in 63.4%, average in 29.6%, excessive in 5.6%, and absent in 1.4% of the patients. Menstruation was resumed in 73.2% within 6 months with a median (IQR) onset of 54.5 days (40–99) postoperative. 11.53 % of patients who resumed their menstruation had abnormal uterine bleeding. Secondary amenorrhea was unrelated to the amount of intraoperative blood loss ($p=0.964$) or to the degree of PAS ($p=0.463$). Dysuria, urgency, stress incontinence, haematuria, and urinary tract infections were experienced in 22 (31%), 1 (1.4%), 3 (4.2%), 1 (1.4%), and 3 (4.2%) patients, respectively. Two (2.4%) and 37 (52.9%) patients reported postpartum dyspareunia and skin paraesthesia, respectively.
- ▶ 40.8 % had an isthmocele of which 37.9% were in the posterior wall. The mean ($\pm$ SD) of the anterior isthmocele depth was 0.59 ($\pm$ 0.26) cm, while the mean ($\pm$ SD) of the posterior isthmocele depth was 0.53 ($\pm$ 0.28) cm. Regarding the anterior isthmocele, the mean ($\pm$ SD) of total myometrium thickness was 1.41 ($\pm$ 0.40) cm and the residual myometrium thickness was 0.71 ($\pm$ 0.31) cm. Regarding posterior wall isthmocele, the mean ($\pm$ SD) of the total myometrium thickness was 1.74 ($\pm$ 0.48) cm and the residual myometrium thickness was 1.03 ($\pm$ 0.23) cm.

Relation between Isthmocele and different parameters (n=71)

	Isthmocele		χ^2	p	OR	p1	95%C.I
	No (n=42)	Yes (n=29)					
Dysuria	14 (87.5%)	8 (66.7%)	1.768	FEp=0.354	0.286	0.198	0.042 – 1.923
Heamaturia	1 (33.3%)	0 (0%)	0.842	FEp=1.000	–	–	–
UTI	1 (33.3%)	2 (40%)	0.645	FEp=0.573	2.727	0.436	0.219– 34.011
Incontinence	1 (33.3%)	2 (40%)	0.645	FEp=0.573	2.727	0.436	0.219–34.011
Urge	0 (0%)	1 (20%)	1.275	FEp=0.448	–	–	–
Vaginal discharge	21 (50%)	16 (55.2%)	0.184	0.668	1.231	0.668	0.476–3.181
Menses resumed							
No	10 (23.8%)	9 (31%)	0.457	0.499	0.694	0.500	0.241–2.004
Yes	32 (76.2%)	20 (69%)					
Irregular	6 (18.8%)	2 (10%)	0.724	FEp=0.463	0.481	0.402	0.087–2.661
Regular	17 (53.1%)	14 (70%)	1.456	0.228	2.059	0.231	0.631–6.712
-Amount	(n=32)	(n=20)					
Minimal	2 (6.3%)	1 (5%)	0.035	FEp=1.000	0.789	0.851	0.067–9.317
Below average	3 (9.4%)	1 (5%)	0.332	FEp=1.000	0.509	0.571	0.049–5.260
Average	19 (59.4%)	16 (80%)	2.379	0.123	2.737	0.130	0.744–10.074
Above average	8 (25%)	1 (5%)	3.440	FEp=0.129	0.158	0.095	0.018–1.375
Menorrhagia	0 (0%)	1 (5%)	1.631	FEp=0.385	–	–	–
-AUB	3 (9.4%)	3 (15%)	0.382	FEp=0.664	1.706	0.540	0.309 – 9.419

χ^2 : Chi square test
OR: Odd's ratio
p: p value for comparing between No Isthmocele and Isthmocele
p1: p value for Odd's ratio
FE: Fisher Exact
C.I: Confidence interval
LL: Lower limit
UL: Upper Limit
UTI: Urinary Tract Infection
AUB: Abnormal Uterine Bleeding

CONCLUSION

- ▶ After myometrium defect closure surgery in PAS, women were able to regain their normal menstrual cycle and reproductive function. The surgery results in the formation of the isthmocele in new sites rather than where they are usually found.