

Comparative analysis of perinatal outcomes in pregnant patients with cervical polyps: polypectomy versus expectant management

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INTRODUCTION

Ultrasound (US) is an effective tool for identifying cervical polyps. Endocervical polyps are associated with cervical insufficiency, preterm birth (PTB), and pregnancy loss. Standard guidelines do not exist for managing cervical polyps in pregnancy.

Objectives: We aim to evaluate the effects of cervical polypectomy on adverse perinatal outcomes. Secondary analysis evaluates cervical cerclage on PTB rates in pregnancies with cervical polyps. We hypothesize that there will be a lower percentage of PTB and perinatal complications in patients undergoing cervical polypectomy compared to the expectant management cohort.

METHODS

Study Design: retrospective cohort study comparing obstetrical outcomes between pregnant patients ≥ 18 yo with cervical polyps undergoing polypectomy versus expectant management. Patients received care at our institution (Corewell Health Butterworth) from 2017 to 2025.

Exclusion criteria: multifetal gestations

Statistical analysis: Fisher’s Exact test compared adverse outcomes of PTB, preterm prelabor rupture of membranes (PPROM), postpartum hemorrhage (PPH), and intraamniotic infection (IAI). Secondary analysis compared PTB rates in patients with and without a cerclage.

RESULTS

- 162 of pregnant subjects with cervical polyps were included
- US diagnosed 10% of cervical polyps
- No statistically significant differences in adverse outcomes were seen between patients undergoing polypectomy during pregnancy compared to patients undergoing expectant management
- After excluding patients with a prior PTB, we observed a higher incidence of PTB (16.4 vs 12.5%), PPROM (9.5 vs 4.2%), and PPH (9.5 vs 0%) in patients who did not have polyp removal compared to those who underwent polypectomy (table)
- Higher incidence of intraamniotic infection was seen in subjects who underwent polypectomy compared to subjects w/o polypectomy (8.3 vs 5.2%)

TABLE 1	Polyp Removed		P – value
	No N = 116 (%)	Yes N = 24 (%)	
Preterm birth	19 (16.4)	3 (12.5)	0.77
PPROM	11 (9.5)	1 (4.2)	0.69
Intraamniotic infection	6 (5.2)	2 (8.3)	0.63
Postpartum Hemorrhage	11 (9.5)	0 (0)	0.21

TABLE 2	No Cerclage N = 137 (%)	Cerclage N = 3 (%)	P-value
Preterm Birth	22 (16.1)	0 (0)	1.00

- Lower prevalence of PTB in subjects with a cerclage (table 2)



CONCLUSION

Cervical polypectomy and cerclages are options for managing cervical polyps in pregnancy. Our data showed a trend towards improved perinatal outcomes, however not statistically significant. There was a higher incidence of PTB, PPROM, and PPH in patients who did not have a cervical polypectomy. Advanced US technology may be increasing our ability to detect intracervical polyps which can facilitate intervention for pregnant individuals. A larger sample may be helpful in achieving statistical significance.

Further research is necessary to determine the best management strategies for cervical polyps during pregnancy in larger cohorts of patients.



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