

Introduction

Pregnancy loss is defined as the spontaneous end of a pregnancy before the fetus has reached viability and encompasses all losses from conception until 20–24 weeks gestation.⁽¹⁾ Recurrent pregnancy loss (RPL) is the failure of two or more clinically recognized pregnancies.^(1, 2)

Chronic endometritis (CE) is defined as localized inflammation of the endometrial mucosa characterized by the presence of edema, increased stromal cell density, dissociated maturation between epithelial cells and stroma fibroblasts, as well as the presence of plasma cell infiltrate in the stroma.⁽³⁾

The reported prevalence in CE women with RPL ranges from 9% to 56%. Update, the impact of CE on reproductive capacity is controversial, but reports suggest it may negatively affect fertility outcomes.⁽⁴⁾

Results

Abnormal hysteroscopic findings (Hyperemic patches, fine adhesions, polyp) were reported in 12 patients (40%). According to immunochemistry findings, 10 out of 30 women (33.3%) were diagnosed with CE based on the presence of plasma cells

Relation between CE and number of abortions

There was no statistically significant relationship between chronic endometritis and number of abortions ($p=0.577$). (Table 1)

Table 1: Relation between immunochemistry findings and number of abortion (n = 30)

Number of abortions	Immunochemistry findings (A)				c ²	MC _p
	Negative (n = 20)		Positive (n = 10)			
	No.	%	No.	%		
2	12	60.0	4	40.0	1.300	0.577
3	3	15.0	2	20.0		
>3	5	25.0	4	40.0		

χ^2 : Chi square test, MC: Monte Carlo, p: p value for comparing between negative and positive

Relation between CE and Fertility

No statistically significant association was found between chronic endometritis and fertility ($p=0.350$). (Table 2)

Table 2: Relationship between Chronic endometritis and Fertility (n = 30)

Fertility	Negative Nulli-para (n = 13)		Positive Nulli-para (n = 6)		c ²	FE _p
	No.	%	No.	%		
	Fertile	8	61.5	2		
In fertile	5	38.5	4	66.7		

χ^2 : Chi square test, FE: Fisher exact test, p: p value for comparing between negative and positive

Conclusion

We found no statistically significant association between CE and RPL. However, considering the high prevalence rate of CE among PRL patients, CE is a condition that must not be ignored during fertility treatment.

References

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Aim of the Work

The study aimed to assess the association between chronic endometritis and unexplained recurrent pregnancy loss.

Patients and Methods

A case series study was conducted at El-Shatby University Maternity Hospital on 30 women aged less than 35 years with unexplained RPL.

Informed consent was obtained from all patients who were included in the study, and they were subjected to complete history taking, laboratory investigations, and transvaginal Ultrasound.

The office hysteroscopy procedures were scheduled in the follicular phase of the menstrual cycle (Day 3–15). At the end of each procedure, an endometrial biopsy was obtained. The endometrial biopsies were examined by routine Hematoxylin and Eosin (H& E) stain. Finally, immunohistochemical staining for the plasma cell marker CD138 was performed.