

Introduction

Endometriosis is defined as an ectopic implantation of endometrial tissue. Its affect 10% of women at reproductive age. In a population of infertile the prevalence of endometriosis can rich 50%.
The aim of the study was to evaluate factors that influence natural conception after surgical treatment of pelvic endometriosis in a population of Tunisian women.

Methodology and research tools:

A monocentric retrospective descriptive study conducted in the department of obstetrics and gynecology of Ben Arous Hospital in Tunisia.

We underwent a review of medical records referring to pelvic endometriosis between 2016 and 2021. 166 medical records were eligible for assessment. Cases who underwent a surgical management had been included in this study. Patients with diminished ovarian reserve and couple with male sever spermatic disorder had been excluded. Laparoscopic surgical treatment was performed in 73 cases.

Results

The average age of our patients was 29.2 years [27 to 39]. The average duration of infertility was 35 months [14 to 66 months]. 55 patients had primary infertility and 18 had secondary infertility.

According to the intraoperative description and the revised American Society of Reproductive Medicine (rASRM) classification, 41.09% of the cases had stage I-II endometrosis and 58.91% had stage III-IV.

Endometriosis stage	Effectif	Percentage
Stage I	14	19.17
Stage II	16	21.19
Stage III	33	45.20
Stage IV	20	27.39

Table 1: Distribution of patients by stage of endometriosis according to the rASRM classification

Results

The most frequent type of lesion was superficial peritoneal lesions (SPL) affecting 83.56% of our patients (n=61). Adnexal involvement was found in 53 cases (72.6%). It was unilateral in 31 patients (58.49%) and bilateral in 22 patients (41.50%). Twenty-three patients (31.5%) had endometriod cysts, bilateral endometriomas were present in three cases.

After laparoscopic surgical treatment, 20 patients obtained a spontaneous pregnancy (27.39%). Among the 53 patients who failed to conceive spontaneously, 37 (69.81%) were managed by assisted reproduction: 11 patients had intrauterine insemination (IUI) (29.72%) and 30 patients benefited from in vitro fertilization (IVF) (81.08%).

Comparison between cases with viable pregnancy and women who failed to conceive found that duration of preoperative infertility was significantly shorter (p = 0.0013) in the pregnancy group (28.9 months vs 40.9 months). Successful treatment of adnexal lesion was also higher in women with viable pregnancy group (57,7% vs 33,3 %) (p =0,0495).

The average time to conception after surgery was 261±120 day. A significantly higher rate of spontaneous pregnancies was noted when the duration of infertility before surgery was less than 24 months (p < 0.001). Stage of endometriosis (stage I and II vs. III and IV), age (less than or greater than 35 years), and the presence of adnexal implant or endometrioma were not significantly associated with achieving a spontaneous pregnancy after surgical treatment of endometriosis.

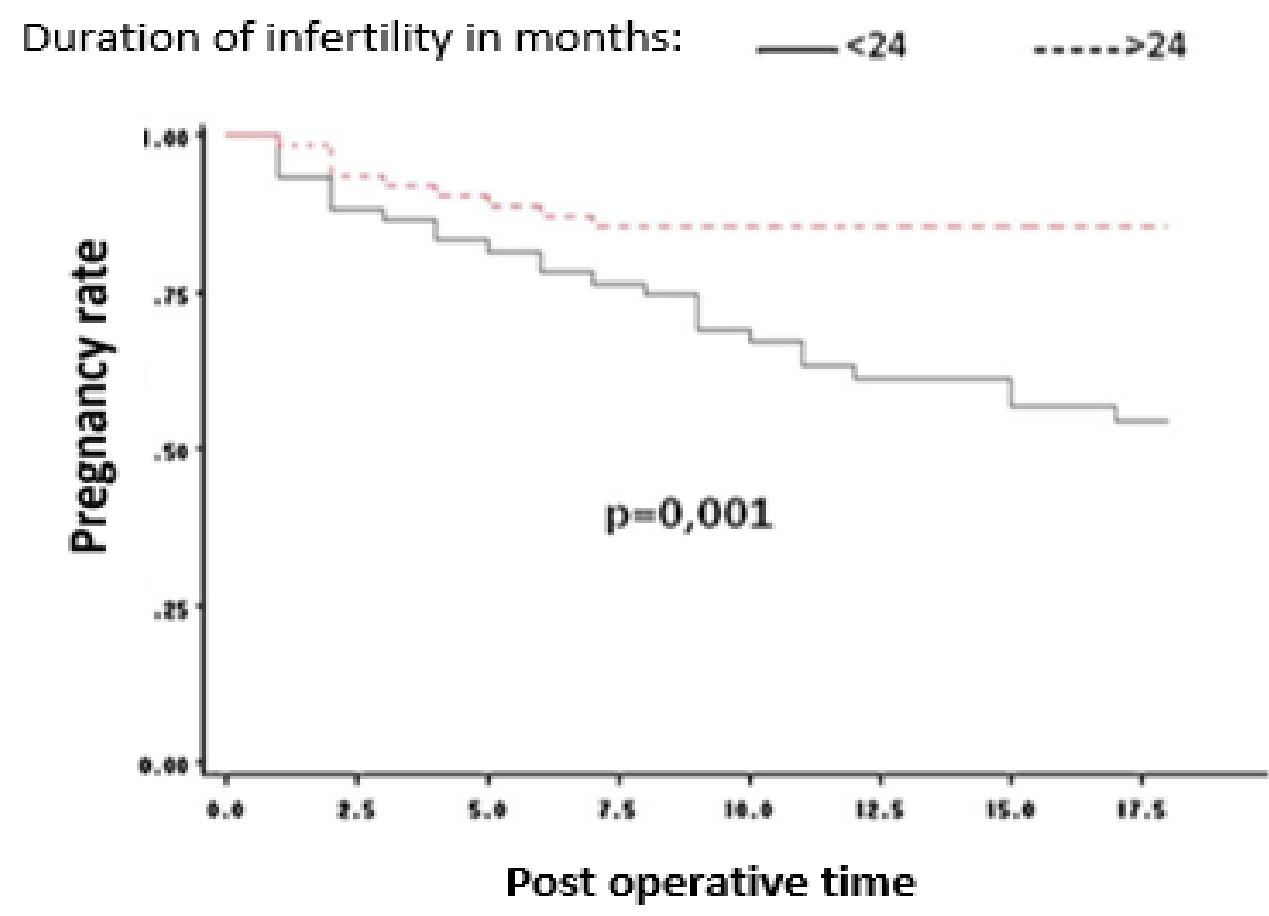


Figure 1: Percentage of patients without pregnancy in the population including only spontaneous pregnancies. Population divided into subgroups according to the duration of infertility.

Discussion

In our series, there was no significant difference in pregnancy rates, spontaneous or with MPA, according to the age of the patients. This criterion is not significant either in the survival analysis. In our study, age does not seem to be a determining criterion for immediate postoperative management with MPA.For some authors, patients over 35 years of age should be referred to MAP because of a decrease in their fertility [1].

The duration of inferility seems to be a determining factor to achieve pregnancy after surgery . In fact, the patients who obtained a successful pregnancy in our study had a significantly shorter history of infertility before the operation than the population without pregnancy (28.9±14.5 months vs 40.9±24.6 months; p = 0.0013). Bourdel and al, in their prospective study, of 123 patients, underlined the negative impact of the prolonged duration of infertility in achieving pregnancy [2].

If we consider the stage of the disease, patients who obtained pregnancies did not differ significantly from those who did not in terms of the stage, type and severity of the endometriotic lesions. The extent of involvement does not therefore seem to be a major factor in postoperative fertility. This confirms the observations of other studies concluding that the r-ASRM stage is not discriminatory in terms of fertility[3] [4].

Conclusion

Pelvic endometriosis is frequently associated with infertility. Appropriate assessment and early management of endometriosis can improve spontaneous conception.

Références

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