

The prevalence of endometriosis in premenopausal women undergoing gynecological surgery

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Summary: Endometriosis is a disease of the female pelvic mesenchyme in which tissue with epithelial and stromal characteristics of the endometrium develops in a situation other than in the uterus. The aim of this study was to evaluate the prevalence of endometriosis in premenopausal women submitted to laparoscopy and/or laparotomy for infertility, chronic pelvic pain, benign ovarian cysts and uterine myomas. The prevalence of the disease was higher in patients with infertility (30.5%), chronic pelvic (45%) and benign ovarian cysts (43%) than in patients with uterine myomas (8.5%).

Key words: Infertility; Chronic pelvic pain; Benign ovarian cysts; Uterine myomas; Endometriosis.

INTRODUCTION

Endometriosis is often associated with infertility, chronic pelvic pain and adnexal masses, but the presence of endometriotic lesions has also been reported among women seeking tubal sterilisation and women with various gynecological disorders (¹).

Since the diagnosis requires direct visualisation of the lesions by laparoscopy and/or laparotomy, data published so far on the prevalence of endometriosis in the general population are not conclusive. In fact only a few studies have been performed with a prospective intent (¹⁻³).

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The aim of the present investigation was to evaluate the presence of endometriosis among premenopausal women submitted to laparoscopy and/or laparotomy for infertility, chronic pelvic pain, benign ovarian cysts or uterine myoma; the three former were chosen because they are often considered to be due to endometriosis, and uterine myoma was chosen because it is considered to be unrelated to endometriosis and therefore patients can be regarded as a control group.

MATERIALS AND METHODS

All premenopausal non pregnant women submitted to laparotomy or laparoscopy at the Department of Obstetrics and Gynecology of the University of Cagliari from May 1991 to May 1993 were included in the study (n=305). The patients, aged 15 to 57 years, underwent surgery for infertility (group 1, n=59), chronic pelvic pain (group 2, n=40), benign ovarian

cysts (group 3, n=65) and uterine myomas (group 4, n=141).

All laparoscopies and laparotomies were carried out by 2 surgeons, who recorded their findings on preprinted sheets. During laparoscopies and laparotomies all the pelvis was systematically inspected. The diagnosis of endometriosis was based on the characteristic visual presentation of the disease. Biopsies were taken when possible. Endometriosis was scored using the Revised American Fertility Society Classification (4).

RESULTS

Endometriosis was diagnosed in 76 out of 305 patients (prevalence in the total study population = 24.9%).

In group 1 (infertility), endometriosis was diagnosed in 18 out of 59 patients (30.5%), in group 2 (chronic pelvic pain) in 18 out of 40 patients (45%), in group 3 (benign ovarian cysts) in 28 out of 65 patients (43%) and in group 4 (uterine myomas) in 12 out of 141 patients (8.5%) (Figure 1).

In group 1, endometriosis was scored Stage I in 10 patients (55.6%), Stage II in 2 patients (11.1%), Stage III in 4 patients (22.2%) and Stage IV in 2 patients (11.1%).

In group 2, the stage of endometriosis was I in 9 patients (50%), II in 3 patients (16.7%), III in 3 patients (16.7%) and IV in 3 patients (16.7%).

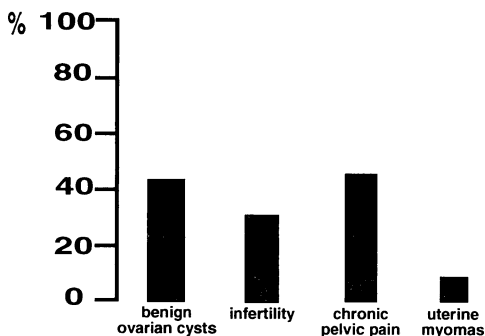


Fig. 1. — Prevalence of endometriosis in the four groups of patients.

In group 3, endometriosis was scored Stage I in 5 patients (17.9%), Stage III in 13 patients (46.4%) and Stage IV in 10 patients (35.7%).

In group 4, endometriosis was scored Stage I in 4 patients (33.3%), Stage II in 3 patients (25%), Stage III in 4 patients (33.3%) and Stage IV in 1 patient (8.4%).

The prevalence of endometriosis by parity is shown in Figure 2, and the prevalence by age in Figure 3.

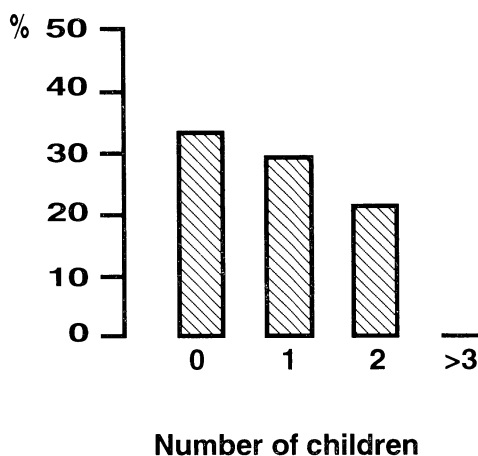


Fig. 2. — Prevalence of endometriosis by parity.

DISCUSSION

The prevalence of endometriosis in the total study population was 24.9%, while in the four groups it was 30.5% (patients with infertility), 45% (patients with chronic pelvic pain), 43% (patients with benign ovarian cysts) and 8.5% (patients with uterine myomas).

Since the prevalence of the pathology is significantly higher in women suffering from infertility, chronic pelvic pain and benign ovarian cysts than in women with myomas, it is confirmed that the former three pathologies have a real correlation with the presence of endometriosis (1-3). However, since endometriotic lesions have

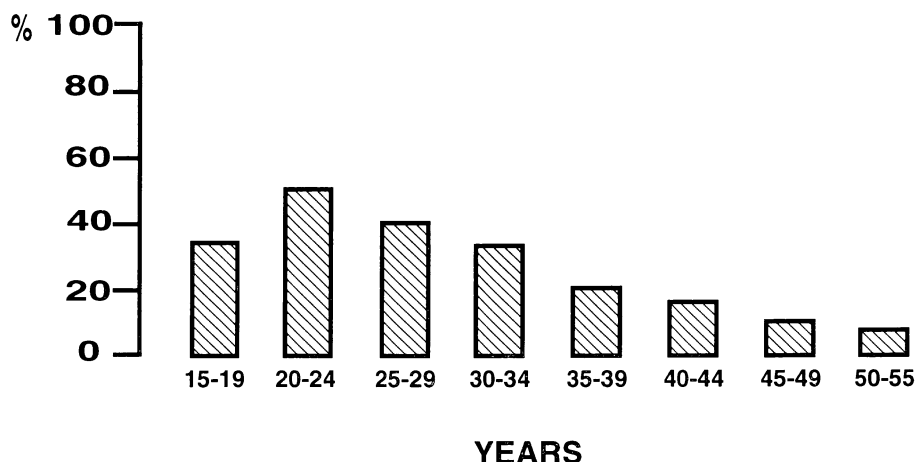


Fig. 3. — Prevalence of endometriosis by age.

been found also in 8.5% of the subjects who underwent laparotomy because of uterine myomas, it is suggested that the presence of endometriotic lesions is not always symptomatic and that "endometriosis presence" is not synonymous with "endometriosis disease".

CONCLUSION

Thus the present study demonstrates that parous women have a lower prevalence of endometriosis than nulliparous ones. This observation has also been reported by other authors (¹). The question in debate, however, is whether the hormonal milieu of pregnancy reduces the risk of endometriosis or whether endometriosis reduces the probability of becoming pregnant.

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