Is minimal or mild endometriosis associated with infertility?

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Record Status
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Authors' objectives
This aim of this report was to assess whether minimal or mild endometriosis is associated with infertility.

Authors' conclusions
- Six studies met the inclusion/exclusion criteria.

- The best evidence available does not confirm an association between minimal and mild endometriosis and infertility. However, a consistent trend in results suggests a negative impact of minimal and mild endometriosis on fertility.

- Four of the six identified studies were conducted among infertile women exclusively. To properly study the effect of endometriosis on fertility, it would be necessary to assess a control group of fertile women for the presence of endometriosis and compare them with cases of infertile women who have endometriosis and no other disorder which could be related to their infertility. One case-control study included a control group of women who were assessed for endometriosis at tubal sterilisation. This study determined that infertility was twice as likely among women diagnosed with minimal endometriosis, though the odds ratio was not statistically significant.

- Evidence for a possible association between minimal and mild endometriosis and infertility was found in two randomised controlled studies conducted to evaluate the effectiveness of removal of the endometriotic lesions. An association could be suggested if, after the endometriosis was removed, fertility became normalised. In a study of 341 women the relative risk of pregnancy was significantly higher in the group of women who had their endometriosis treated. However, the fecundity rate per month was less than that estimated for women with normal fertility (6% vs 20%). The second study of 101 women did not observe a significant improvement in pregnancy rate between the group of women who had their endometriosis treated and those who did not but this could be due to insufficient power.

- A further contribution to the ambiguous relationship of endometriosis to infertility is provided in studies comparing fertility between infertile women with endometriosis and women with unexplained infertility. Two prospective cohort studies found that among infertile women, there was no significant difference in pregnancy rates whether the diagnosis was minimal or mild endometriosis or if it was unexplained infertility. Maruyama et al (2000) reported that among women with no tubal adhesions, the presence of endometriosis did not significantly reduce pregnancy rates at 18 months follow-up (pregnancy rates: no endometriosis: 44%; minimal/mild: 32%; moderate/severe: 38%). This study confirms the results of an earlier, larger study of 168 infertile women with mild or minimal endometriosis and 263 women with unexplained infertility in which it was observed that after 36 weeks of follow-up the cumulative probability of an established pregnancy was lower but not significantly different from that for women whose infertility diagnosis was unexplained.

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