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[Intervention Review]

Laparoscopic surgery for pelvic pain associated with endometriosis

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ABSTRACT

Background

Endometriosis is the presence of endometrial glands or stroma in sites other than the uterine cavity. It is variable in both its surgical appearance and clinical manifestation often with poor correlation between the two. Surgical treatment of endometriosis aims to remove visible areas of endometriosis and restore anatomy by division of adhesions and relieve painful symptoms.

Objectives

To assess the efficacy of laparoscopic surgery in the treatment of pelvic pain associated with endometriosis.

Search methods

For the update in July 2009 we searched the Cochrane Menstrual Disorders and Subfertility Group's specialised register of trials (searched July 2009), the Cochrane Controlled Trials Register (The Cochrane Library, Issue 2, 2009), MEDLINE (1966 July 2009), EMBASE (1980 July 2009), and reference lists of articles.

Selection criteria

Randomised controlled trials were selected comparing the effectiveness of laparoscopic surgery used to treat pelvic pain associated with endometriosis, with other treatment modalities or diagnostic laparoscopy only.

Data collection and analysis

Assessment of trial quality and extraction of relevant data was performed independently by two reviewers.

Main results

Five studies were included in the meta-analysis, including three full papers and two conference reports. All the randomised controlled trials with the exception of [Lalchandani 2003](#) compared different laparoscopic surgical techniques with diagnostic laparoscopy only. [Lalchandani 2003](#) compared laparoscopic coagulation therapy with diagnostic laparoscopy and medical treatment. Three studies ([Abbott 2004](#); [Sutton 1994](#); [Tutunaru 2006](#)) reported the pain scores six months post operatively. Meta-analysis demonstrated an advantage of laparoscopic surgery when compared to diagnostic laparoscopy only (OR of 5.72 95%CI 3.09 to 10.60 ; 171 participants, three trials, [Analysis 1.1](#)). A single study ([Tutunaru 2006](#)) reported pain scores twelve months after the procedure. Analysis demonstrated an advantage of laparoscopic surgery when compared to diagnostic laparoscopy only (OR of 7.72 95%CI 2.97 to 20.06 ; 33 participants, one trial, [Analysis 1.1](#)).

Authors' conclusions

Laparoscopic surgery results in improved pain outcomes when compared to diagnostic laparoscopy alone. There were few women diagnosed with severe endometriosis included in the meta-analysis and therefore any conclusions from this meta-analysis regarding treatment of severe endometriosis should be made with caution. It is not possible to draw conclusions from the meta-analysis which specific laparoscopic surgical intervention is most effective.

PLAIN LANGUAGE SUMMARY**Laparoscopic surgery reduces pelvic pain caused by endometriosis.**

Endometriosis is the presence of tissue that normally lines the uterus in inappropriate sites (usually within the pelvic cavity). It can cause fertility problems, painful menstruation and painful sexual intercourse. Hormonal drugs such as the oral contraceptive pill are used but may have adverse effects and are not suitable for women wishing to become pregnant. Laparoscopic surgery (where small incisions are made in the abdomen) is performed to remove visible areas of endometriosis. The review of trials found that laparoscopic surgery is effective in treating pelvic pain associated with endometriosis. More research is needed.