Endometriosis and Pelvic Pain

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Endometrium: the lining on the inner cavity of the uterus; the lining that produces the menstrual flow each month.

Endometriosis: tissue microscopically resembling endometrium is found outside the uterus.

Normal ovarian hormonal cycle: the pituitary gland tells the ovaries what to do. The ovaries produce estrogen and progesterone and eggs. Estrogen and progesterone tell the endometrium when to bleed. When the endometrium bleeds, the endometriosis implants respond to the same hormones with bleeding.*

Peritoneum: transparent, Saran Wrap-like lining of the pelvis. Endometriosis occurs on this lining.

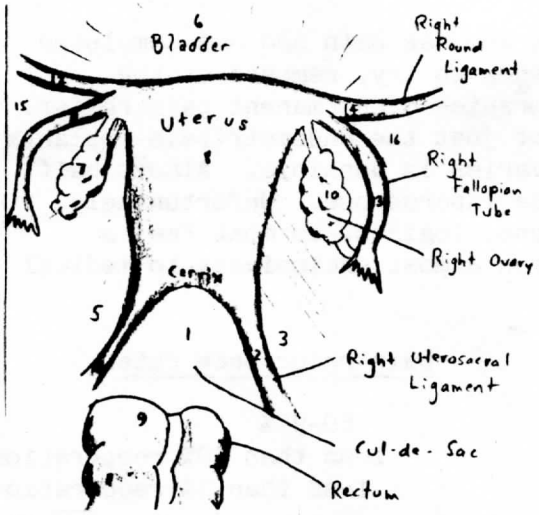
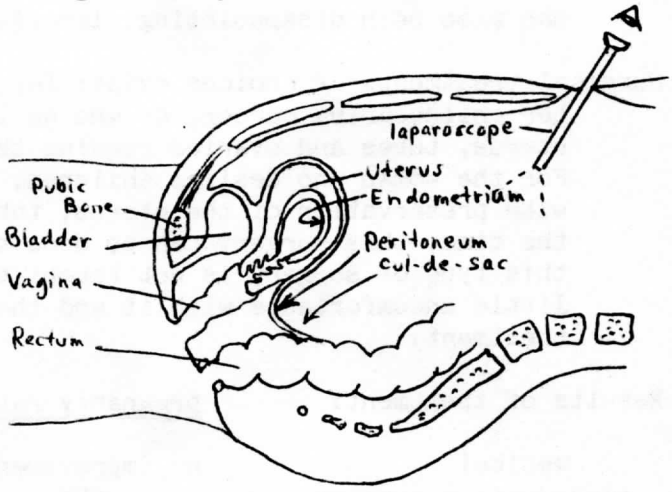


Diagram of the pelvic organs with the patient on her back. The numbers refer to the order of frequency of involvement of pelvic structures.



Cross section through the middle of the pelvis with the patient on her back, undergoing laparoscopy.

* These were Dr. Redwine's early thoughts. He has since come to realize that endometriotic lesions do not in fact bleed nor respond to hormonal changes in the same way as native endometrium.

Symptoms: Pelvic pain is the most common symptom, frequently burning, stinging, or knifelike. Pain with sexual intercourse with deep penetration, painful menstrual cramps also are common. Only about a quarter of patients with the disease complain of infertility. 20% of patients have no symptoms at all. Pain with exercise is common.

Fertility: Since most women with the disease have been pregnant and have had children, this is a disease of fertile women, although it is doubtful that pregnancy causes the disease. Older reports identified an increased number of never-pregnant patients with the disease, and unfortunately the idea has crept into gynecologists' minds that pregnancy is protective or possibly curative. This notion has long been accepted without question and has never been proven. New data indicates that pregnancy has absolutely no effect on the extent of disease.

Medical treatment: is based on 2 observations from Nature: the pain of endometriosis improves during pregnancy (only to usually recur later) and the pain of the disease usually goes away after the menopause. The improvement of pain during pregnancy combined with the faulty observation that it is a disease of never-pregnant women who have postponed child-bearing has led to the erroneous conclusion that pregnancy is good treatment for the disease, although it is now known that pregnancy has no effect whatsoever on the disease other than temporary pain diminution. From these faulty observations, birth control pill therapy arose, and it has , of course, been disappointing. The observation of pain diminution after menopause has led researchers to conclude (again without proof) that the disease disappears after menopause, and a medicine called danazol was developed to mimic the menopause. Danazol has also been disappointing, largely because of leaps of faith made by researchers.

Surgical treatment: 2 choices exist: for the woman who has pain and has completed her childbearing career, or who no longer wishes to try, removal of the uterus, tubes and ovaries remains the best gurantee of permanent pain relief. For the woman who desires children, removal of just the endometriosis implants with preservation of the uterus, tubes and ovaries is possible. Almost half the time, this surgery can be done through the laparoscope. Unfortunately, this type of surgery is not taught to most gynecologists, so most feel a little uncomfortable with it and therefore lean almost exclusively to medical treatment.

Results of treatment:	pregnancy rate	pain recurrence rate
medical	no improvement	60-95%
conservative surgery	+ 45%	less than 10% reoperation
radical surgery	0	less than 1% reoperation

Theories of origin:

Mulleriosis
Reflux menstruation
Metaplasia
Lymphatic spread
Bloodstream spread