LAPAROSCOPIC MYOMETRIAL ELECTROCOAGULATION AND ADE

A laparoscopic surgery which is done as a procedure to treat adenomyosis.

About Laparoscopic myometrial electrocoagulation and ade

Laparoscopic myometrial electrocoagulation is a procedure, which main purpose is to induce localised coagulation (the process by which blood changes from a liquid to a gel, forming a blood clot) and necrosis (a form of cell injury which results in the premature death of cells).

The key element in laparoscopic surgery is the use of a laparoscope, a long fiber optic cable system which allows viewing of the pelvic area by snaking the cable from a more distant, but more easily accessible location- in this case the navel (Pic. 1). At 1-2 cm intervals the needle punctures are done into to uterus to deliver unipolar or bipolar coagulation current (the application of a high-frequency alternating polarity, electrical current to biological tissue as a means to clotting the blood).

Adenomyosis is a gynecologic medical condition characterized by the abnormal presence of endometrial tissue (the inner lining of the uterus) within the myometrium (the thick, muscular layer of the uterus). Thanks to laparoscopic myometrial electrocoagulation endometrial tissue localised in myometrium than became shrinking and the activity is lowered and women do not suffer from symptoms caused by adenomyosis.

Success or failure factors

Surgical excision

Surgical excision (removal of part or all of a structure or organ) is more accurate than electrocoagulation, because electrical conduction in the abnormal tissue may be
incomplete. During the surgery, surgeons can check if there is remaining tissue, but not in case of electrocoagulation it is not possible.

This procedure can be done repeatedly in cases of recurrence, until the onset of the menopause, when the symptoms cease (heavy bleeding, menstrual cramps, bloating before menstruation, lower abdominal pressure).

This technique is best suited for women 40 years of age and who do wish to conceive but who wanted to avoid hysterectomy.

**Complications**

The remaining myometrial tissue can have reduced strength due to electrocoagulation and it can be difficult to apply with precision. There is a risk of emergency hysterectomy (surgical removal of the uterus) because of uncontrollable bleeding during the procedure. After the surgery, remaining tissue can formate adhesions (fibrous bands that form between tissues and organs) with high incidence.

**Prognosis**

Adenomyosis can only be cured definitively with surgical removal of the uterus. In those patients who are averse to surgery or those who wish to preserve their reproductive potential, newer, conservative medical and minor surgical procedures are increasingly being used in the treatment of adenomyosis.

After this procedure the myometrial scar healing may be variable, but reduced myometrial volume may jeopardize fertility. Women is capable of conception, but when became pregnant, there is a high chance of uterine rupture during the future pregnancy.

**Find more about related issues**

**Diagnoses**

**Adenomyosis**
Medical condition characterized by the presence of ectopic endometrial tissue within the myometrium.
Learn more at: [www.fertilitypedia.org/therapy/diag/adenomyosis](http://www.fertilitypedia.org/therapy/diag/adenomyosis)

**Gallery**
Pic

A visualization of laparoscopic surgery.

Sources


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