Operative gynaecology dr. alaa al-nasser

 Hysterectomy (surgical removal of the uterus) is the most commonly performed gynecological surgical procedure.

**INDICATIONS** — There are five broad diagnostic categories of indications for hysterectomy:

* Uterine leiomyomata
* Pelvic organ prolapse
* Pelvic pain or infection (eg, endometriosis, pelvic inflammatory diseases)
* Abnormal uterine bleeding
* Malignant and premalignant disease
* Ceaserian hysterectomy
* Therapeutic abortion
* Molar pregnancy
* Septic abortion
* Chronic inversion of uterus

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**Surgical approach** — Hysterectomy may be performed using one or a combination of the following approaches, including:

* Abdominal
* Vaginal
* Conventional laparoscopic
* Robot-assisted laparoscopic

The choice of surgical approach depends upon the indications for the procedure, concomitant procedures, surgical outcomes of each approach, surgeon experience, and patient preference.

Abdominal versus vaginal hysterectomy — Most studies have concluded that vaginal hysterectomy should be the preferred route of hysterectomy because it is associated with fewer complications, shorter length of hospitalization, and lower hospital charges than abdominal hysterectomy

Historically, abdominal hysterectomy has been designated as the appropriate route for more serious conditions believed to necessitate a more thorough abdominopelvic exploration, as well as procedures deemed too difficult to perform through the vagina. This opinion was the result of poorly defined, but traditionally accepted, contraindications to the vaginal route, including: uterine enlargement (uterine weight estimated <280 g [a normal uterus weighs 70 to 125 g] or uterine size less than 12 weeks); vagina deemed "too narrow" (eg, vagina narrower than 2 finger-breadths, especially at the apex); lack of uterine descensus and mobility; presence of adnexal disease; prior pelvic surgery; malignancy; contracted pelvis; and need to explore the upper abdomen

 Uterine mobility — While greater uterine mobility is typically associated with prior vaginal delivery, vaginal hysterectomy is not contraindicated in nulliparous women [.All patients without prolapse undergoing hysterectomy for benign conditions were included, except those with adnexal/tuboovarian disease, evidence of extensive endometriosis with associated uterine immobility, disease outside the pelvis necessitating abdominal exploration, and uterine size estimated at greater than 16 weeks. ………………………………………………………………………..

* Uterine size
* Prior cesarean delivery — Surgeons have been reluctant to perform vaginal hysterectomy in woman with a prior cesarean delivery due to concerns about scarring in the lower uterine segment leading to bladder trauma, excessive bleeding, and eventual failure of the vaginal route.
* Null parity.
* Need for oophorectomy —oophorectomy is not a contraindication to the vaginal route.
* Obesity — Exposure of the operative field can be difficult in obese women, whether an abdominal or vagina route is taken. The vaginal approach is suggested for obese women requiring hysterectomy because it can be successfully performed in this population and is associated with lower postoperative morbidity than abdominal hysterectomy.

Total versus subtotal (supracervical) — Some women desire to retain the cervix believing that it may affect sexual satisfaction after hysterectomy. It has been postulated, without data, that removal of the cervix causes excessive neurologic and anatomic disruption, thereby leading to increased operative and postoperative morbidity, vaginal shortening, subsequent vault prolapse, abnormal cuff granulations, and the potential for fallopian tube prolapseThere was no difference in the rates of incontinence, constipation or measures of sexual function (sexual satisfaction, dyspareunia).

* Length of surgery and amount of blood lost during surgery were significantly reduced during subtotal hysterectomy compared with total hysterectomy, but there was no difference in the likelihood of transfusion.
* Febrile morbidity was less likely and ongoing cyclical vaginal bleeding one year after surgery was more likely after subtotal hysterectomy.
* There was no difference in the rates of other complications, recovery from surgery, or readmission rates.

**COMPLICATIONS**

Bowel injury specially if previous adhesion or sugury

Hematoma

Ureteric injury, bladder injury

Ovarian infarction by restriction of ov. Blood supply

Urinary incontinence — Hysterectomy may result in damage to the nerve supply or supportive tissues of the pelvic floor, which may lead to subsequent pelvic floor dysfunction.

Pelvic organ prolapse — Hysterectomy is associated with a risk of subsequent surgery for pelvic organ prolapse, particularly if prolapse was present at the time of surgery. The risk may depend whether prolapse is present at the time of hysterectomy and on the surgical approach. Potential mechanisms for post-hysterectomy prolapse include alteration in connective tissue or surgical injury to the innervation and vascularization of the pelvic floor muscles.

Vaginal hysterectomy may be associated with an increased risk of subsequent pelvic organ prolapse than an abdominal approach

Pelvic organ fistula — In developed countries, pelvic surgery, and hysterectomy in particular is a major risk factor for the development of pelvic organ fistula

**myomectomy**

Uterine leiomyomas (fibroids) are the most common pelvic tumor in women. Abnormal uterine bleeding, the most common symptom associated with fibroids, is most frequent in women with tumors that abut the endometrium, including submucosal and some intramural fibroids.

**Indications**— The most common indications myomectomy:

* Abnormal uterine bleeding
* Recurrent pregnancy loss
* Infertility

 **Contraindication**

1. Complete child bearing
2. Functionless tubes
3. Endometrial and pelvic TB
4. Associated with bilateral ovarian endometriosis
5. Pregnancy and during c/s.
6. After menopause except for large pediculate fibroids
7. Suspected malignancy

 **Complication**

1. Hg.
2. Gaseous distention
3. Adhesion to small bowel to uterine scar
4. Injury to bladder and ureter
5. Damage to f. tubes

curettage

INDICATIONS — D&C has both diagnostic and therapeutic indications.

**Diagnostic indications**

* With a nondiagnostic office biopsy who are at high risk of endometrial carcinoma. With endometrial hyperplasia, and in whom endometrial cancer needs to be excluded.
* With insufficient tissue for analysis on office biopsy.
* In whom cervical stenosis prevents the completion of an office biopsy.
* For whom another operative procedure, such as hysteroscopy or laparoscopy, is deemed necessary.

**Therapeutic indications**— Dilation and evacuation/curettage (D&EC) is used as a therapeutic modality in the following clinical settings:

* Treatment of incomplete, inevitable, missed, septic, and induced abortions. Initial treatment of molar pregnancies
* Temporary management of women with prolonged or excessive vaginal bleeding unresponsive to hormonal therapy.
* Suction curettage (without dilation) may be used to manage postpartum hemorrhage due to retained products of conception.
* Remove endometrial polp, IUCD

 CONTRAINDICATIONS — The only major contraindication to D&C is viable and desired intrauterine pregnancy. Bleeding diathesis is a relative contraindication since bleeding may be excessive in such patients.

**COMPLICATIONS** — Complications are rare and include:

* Anesthesia related complications
* Hemorrhage
* Uterine perforation
* Infection
* Formations of intrauterine adhesions
* Trophoblast embolization (if gestational trophoblastic disease present)

**Endometrial sampling**

Office sampling versus dilation and curettage — Endometrial sampling offers a number of advantages compared with dilation and curettage:

* Operative setting is an outpatient clinic, rather than an operating room.
* May be performed without anesthesia or with only local anesthesia.
* Minimal or no cervical dilation is required.
* The risk of uterine perforation is decreased (office endometrial sampling: 0.1 to 0.2 percent versus dilation and curettage: 0.3 to 2.6 percent
* Operating time is brief; actual sampling time is approximately 5 to 15 seconds.
* Less expensive.

**INDICATIONS AND CONTRAINDICATIONS**

**Indications**— Indications for endometrial sampling include:

* Abnormal uterine bleeding
* Surveillance for endometrial cancer in women who are at high risk or have a history of endometrial neoplasia

**Contraindications**— The only absolute contraindication to endometrial sampling is the presence of a viable and desired pregnancy.

A bleeding diathesis is a relative contraindication since bleeding may be excessive in such patientsIn the presence of acute vaginal, cervical, or pelvic infection, the procedure should be deferred, if possible, until the infection has been treated.

In rare instances, in which endometrial sampling needs to be performed in a woman with cervical cancer, an obstructing cervical lesion may be a relative contraindication in some patients due to increased risk of bleeding or uterine perforation.

Sampling can be performed with an intrauterine device in place. In our practice, we have done so without complications .