Introduction to gynecology
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Objectives
1. perform the medical interview & physical exam of women incorporating ethical, social and diversity perspectives to provide culturally competent health care.
2. Apply recommended prevention strategies to women throughout life span.
3. Apply knowledge of gynaecological problems.
5. Communication & clinical skills

Gynecology is the medical practice dealing with the health of the female reproductive systems (vagina, uterus and ovaries) and the breasts. Its counterpart is andrology.

Assessment of the gynecologic history and the pelvic examination is part of the assessment of female patients in many clinical contexts.

Clinician familiarity with the gynecologic evaluation can help reduce anxiety for both patients and health care
professionals.

GYNECOLOGIC HISTORY

The history should be obtained in a relaxed and private setting, before the patient is asked to disrobe. She should be interviewed alone under most circumstances, unless there is a hearing or language barrier. Questioning should proceed from very straightforward, objective information to more delicate issues. The provider should evaluate and respond to the patient's comfort level and make every effort to remain supportive.

One should begin the history with an open-ended question that will elicit the woman's gynecologic concerns.

She should be encouraged to describe the situation in her own words and without frequent interruptions.

Maintaining eye contact, nodding, and brief clarification of important points convey the provider's attention to the woman's issues.

The provider can then ask questions to proceed with the evaluation.
Basic history

**Menstrual history All women**

- Age of menarche (onset of first period)
- Prior history of menstrual irregularity
- Prior history of heavy or intermenstrual bleeding
- Prior history of dysmenorrhea

**Women of reproductive age and in the menopausal transition**

- Date of last menstrual period (LMP) (first day of bleeding or spotting)
- Date of previous menstrual period
- Current cycle length (interval between LMP and previous menstrual period) and regularity (cycle pattern over past year)
- Number of days of bleeding in an average menses
- Current or recent heavy or intermenstrual bleeding
- Current or recent postcoital bleeding
- Current or recent dysmenorrhea
- Presence of premenstrual symptoms
Postmenopausal women

Age at last menses

History of hormone therapy

History of postmenopausal bleeding

Obstetrical history History of any pregnancies

History of miscarriages, terminations, or ectopic pregnancies

History of assisted reproduction

For each pregnancy carried:

Date of delivery

Gestational age at delivery

Mode of delivery with indication for operative delivery

Maternal complications, such as hypertension or diabetes

Fetal complications, such as growth restriction, anomalies or stillbirth

Delivery or operative complications

Neonatal problems

Current health of children

Current symptoms or history

pelvic, vaginal, or vulvar infections – vaginal discharge,
vulvar or vaginal lesions, fever, pelvic pain, abnormal genital tract bleeding, prior sexually transmitted infections or pelvic inflammatory disease (diagnosis, frequency, and treatment)

**Cervical cytology (Pap test) history**

date and result of last test; diagnosis and follow-up of abnormal Pap smears

**History of other gynecologic problems**
such as ovarian cysts, uterine fibroids, infertility, endometriosis, or polycystic ovarian syndrome - mode of diagnosis and treatment

Symptoms of pelvic organ prolapse or urinary or anal incontinence

**History of gynecologic procedures**

D&C removal of uterine contents for various reasons, including completing a partial miscarriage and dx sampling for dysfunctional uterine bleeding refractive to medical therapy

**Hysterectomy removal of the uterus**

**Oophorectomy removal of ovaries**

**Tubal ligation permanent sterilization**
Hysteroscopy inspection of uterine cavity

Laparoscopy inspection of pelvis through abdomen to dx and Rx gynecological disease

Laparotomy for gynecological reasons

Cervical excision procedure

Pap smear

date, indication, complications

Screening for intimate partner violence.

**Menopause is defined by 12 months of amenorrhea after the final menstrual period.** Postmenopausal bleeding refers to any uterine bleeding in a menopausal woman (other than the expected cyclic bleeding that occurs in women taking sequential postmenopausal hormone therapy). While menopause may occur in some women in their 40s, other causes of amenorrhea and abnormal uterine bleeding should be considered, particularly for patients in their early 40s.

Pelvic pain — The characterization of pelvic pain should include the time of onset, duration, location, quality, and severity. The relationship of the pain to menstruation, physical activity, or sexual activity and alleviation of the pain with analgesics, hormonal contraceptives, or position change are useful
components of the pain history. Associated gastrointestinal or urinary symptoms could point to a nongynecologic source of the pain. However, ovarian torsion is often accompanied by nausea and vomiting.

Urinary incontinence and pelvic organ prolapse — Urinary incontinence occurs among women of all ages and requires evaluation when the involuntary loss of urine is bothersome. Historical factors, such as leakage of urine with physical activity (exercise, lifting, coughing, sneezing) versus an overwhelming urge to void with leakage of urine before reaching a toilet, can help to differentiate stress incontinence from detrusor instability. A careful voiding and intake history will help the clinician determine the underlying cause.

Women with pelvic organ prolapse may complain of a vaginal bulge, vaginal pressure, or the need to place a finger in the vagina to void or defecate. Such symptoms should be evaluated further with physical examination.

Sexual function — Many sexual problems result from and/or cause reproductive dysfunction and gynecologic problems. Sexual issues include prevention of sexually
transmitted infections, contraception, sexual dysfunction, and prevention and management of sexual assault.

Do you have sexual concerns?

Are you currently having or have you ever had sexual relations?

Have you recently had any new partners or sexual contacts?

Do you protect yourself from pregnancy and sexually transmitted infections?

Would you like to be screened for sexually transmitted infections?

Do you need contraception or preconceptional counseling?

Are you currently experiencing or have you experienced previous sexual abuse?

Infertility is defined as failure of a couple to conceive after 12 months of regular intercourse without use of contraception in women less than 35 years of age, and after six months of regular intercourse without use of contraception in women 35 years and older. Before proceeding with an infertility evaluation, the provider should confirm that the couple is having regular,
frequent intercourse during the middle of the menstrual cycle. Once the diagnosis is established, the infertility history should focus on three factors: ovulation, tubal and uterine problems, and male factors.

PELVIC EXAMINATION

Pelvic examination is indicated in any patient with genital or pelvic symptoms and in other patients for preventive care.

Age at initial examination — A pelvic examination is not included unless indicated due to symptoms or for screening for a sexually transmitted infection.

Preparing for the examination

Patient consent — The clinician should request permission before starting a pelvic examination. Written consent is not required, with the exception of examination under anaesthesia, female chaprone should be present, unless urinary incontinence female should be asked to empty her bladder.

Equipment — The basic equipment needed to perform a pelvic examination includes:

An examining table with stirrups (or means for elevating the buttocks when stirrups aren't available [eg, the patient is
on a stretcher or in bed]

Good light source (preferably cold light)

Speculum of appropriate size.

Materials to obtain cervical cytology

Materials to test for common infections – chlamydia, gonorrhea, herpes simplex virus

Cotton swabs for obtaining samples of vaginal discharge

pH indicator paper

Dropper bottles of saline and potassium hydroxide for performing wet preps

Large cotton swabs to absorb excess vaginal discharge or blood

Test kits for fecal occult blood

Water soluble lubricant, disposable gloves, material to drape the patient

Components of the examination — The pelvic examination traditionally includes the internal and external genitalia, and pelvic organs. Comprehensive examination also includes evaluation of some components of the urinary and gastrointestinal tracts, including the urethra, anus, and rectum. A more comprehensive examination, involving the
abdomen, breast, and other sites, may be indicated to provide complete primary care or to evaluate gynecologic problems that involve other organ systems.

Abdomen — Examination of the abdomen should be performed using the standard techniques of inspection, auscultation, palpation, and percussion. The examiner should observe for abnormalities of skin color and intestinal peristalsis, hernias, organomegaly, masses, fluid collection, and tenderness.

External genitalia — The external genitalia are inspected and palpated (The hair distribution, skin, labia minora and majora, perineal body, clitoris, urethral meatus, vestibule, and introitus are evaluated for developmental abnormalities, skin lesions (eg, discoloration, ulcers, plaques, verrucous changes, excoriation), masses, and evidence of trauma or infection. Bartholin and paraurethral glands — The Bartholin gland openings are located at the 4 and 8 o'clock positions just outside the hymenal ring. The glands are not palpable when healthy. The paraurethral glands, the largest of which are Skene's glands, are adjacent to the distal urethra; the gland ducts open into the urethra or just outside the urethral orifice. If enlarged or tender, an attempt should be made to express exudate, which suggests
Speculum examination

The vagina is first inspected using a speculum of appropriate size, lubricated with warm water or a water soluble lubricant. Lubricants do not appear to interfere with sampling for cervical cytology.

Atraumatic insertion is aided by assisting muscle relaxation at the opening of the vagina. This may be accomplished by advising the patient to relax her legs to the sides and also by inserting a finger into the distal vagina and gently applying downward pressure. The speculum is then inserted and downward pressure applied. The speculum is advanced in a direction free of resistance and opened as the apex of the vagina is reached.

Vaginal lesions, anomalies, or atrophic mucosa are noted. If abnormal discharge is identified, the volume, color, consistency, and odor should be noted and a sample taken with a cotton swab. The pH of physiologic vaginal discharge is less than 4.5; an elevated pH may be due to infection (eg, bacterial vaginosis) or exogenous substances (eg, semen).

The degree of vaginal wall relaxation and uterine prolapse is evaluated, if indicated, by removing the top blade of the
speculum and using the posterior blade as a retractor. It is helpful to ask the patient to bear down to determine the degree of uterovaginal descensus.

Lesions or discharge of the cervix are noted. Cervical cultures and cervical cancer screening are performed, as appropriate.

**Bimanual examination**

The index and middle fingers of the dominant hand are normally used to examine the vagina and uterus, although some providers find that switching hands during the examination facilitates evaluation of the adnexa. Only a single finger can be inserted comfortably in patients with a narrow introitus or small vaginal orifice. The abdominal hand should be used to sweep the pelvic organs downward, while the vaginal hand is simultaneously elevating them.

The uterus is assessed for size, shape, symmetry, mobility, position, and consistency. The uterine size and consistency vary according to reproductive status (parity, menopausal status). The terms used to describe this are:

- **Axial** — the axis of the uterus is the same as the vaginal axis
- **Version** — position of the entire uterus relative to the axis of the vagina; eg, anteverted, retroverted
Flexion — position of the uterine fundus relative to the axis of the cervix; eg, anteflexed, retroflexed

The adnexal areas are checked for the presence of appropriately sized, mobile ovaries (eg, about 2 by 3 cm), which are normally somewhat tender. Palpable ovaries in postmenopausal women are not a "normal" finding (detectable in about 30 percent of postmenopausal women. and require investigation, although most are associated with benign or no disease.

The ability to palpate the ovaries during a clinical examination in the office depends upon several factors, including the patient's body habitus, the examiner's experience, the time taken to perform the examination, and the presence of other pelvic abnormalities. Ovaries can be difficult to palpate, even by experienced clinicians under ideal circumstances.

**Rectovaginal examination**

Another potential component of the gynecologic assessment is the rectovaginal examination. This allows optimal palpation of the posterior cul-de-sac and uterosacral ligaments, as well as the uterus and adnexa. It performed as an alternative to vaginal exam in children and adult never have sexual activity it will help to pick up pelvic mass, differ. enteroceole and rectoceole palpate uterosacral ligament. (index finger vagina, middle finger
If a rectovaginal examination is performed, anorectal findings should be documented (eg, hemorrhoids, rectal mass). If indicated, stool on the examining glove can be tested for occult blood. However, a single sample does not suffice for colorectal cancer screening; screening is better accomplished by home collection of stool samples.

When performing the rectovaginal examination, using a lubricated examining glove and asking the patient to strain against the examiner's finger will usually allow the sphincter to relax and decrease discomfort. The same finger should not be used to examine both the vagina and rectum to avoid transmission of HPV or contamination with blood, which may alter fecal occult blood testing, performed.