Reviewed By
RAAOUM M. JABOR

History Taking & Physical Examination

Objectives:

→

- → Slides
- → Important
- → Golden notes
- → Extra
- → Doctor's notes
- → Previous Doctor's notes
- → Reference

Kaplan Video

Editing File

Obstetric History

Steps of Obstetric History:

→ General information
→ History of current pregnancy
→ Past Obstetric history
→ Gynecological history
→ Enquiry about other systems:
→ Past medical and surgical history
→ Psychiatric history
→ Family history
→ Social history
→ Drug history
→ Allergies
→ Summary

1. General Information:

→ Name
→ Age
→ Presenting complaint (patients words not medical words) or reason for attending.

2. History of Current Pregnancy:

→ **Gravidity: total numbers of pregnancies** regardless of how they ended.
  → No previous pregnancy G = 0
→ **Parity:** number of **live births** at any gestation or **stillbirths after 24 weeks** of gestation.
  → G1P0 → woman is pregnant for the first time and has not yet delivered.
  → G1P1 → woman has had one pregnancy and has delivered once.
→ **Gestation (GA):** weeks calculated from ultrasound or based on LMP and the wheel.
  → **Methods to calculate GA:**
    → Based on LMP (1st first day of the last menstrual cycle to current date, normally 38 - 42 days).
    → Based on US (more accurate).
→ **LMP:** last menstrual period.
→ **EDD:** expected date of delivery (Naegele's rule).
  → Add 7 days to first day of LMP, subtract 3 months, add one year (EDD = LMP + 7 days - 3 months + 1 year).
    → **Example:**
      → **LMP:** 27 /8/2014
      → **EDD:** 3/6/2015
→ Dates as calculated from ultrasound.
→ Single / multiple (chorionicity).
→ Detailed of presenting problem.
→ Have there been any other problems in this pregnancy? to prevent recurrent.
→ Has there been any bleeding , contractions or loss of fluid vaginally + fetal movement?

Obstetric History

3. Past Obstetric History:

- List the previous pregnancies and their outcomes in order:
  - Date of delivery (or pregnancy termination).
  - Location of delivery (or pregnancy termination).
  - Duration of gestation (recorded in weeks).
    - If correlated with birth weight → assessment of fetal growth patterns.
    - Gestational age of any spontaneous abortion important in any subsequent pregnancy.
  - Type of delivery (or method of terminating pregnancy).
    - Important for planning method of delivery in present pregnancy.
    - Difficult forceps delivery or a cesarean delivery → require personal review of labor and delivery records.
  - Duration of labor (recorded in hours).
    - Alert physician to the possibility of an unusually long or short labor.
  - Type of anesthesia.
    - Any complications of anesthesia should be noted.
  - Maternal complications.
    - Urinary tract infections, vaginal bleeding, hypertension and postpartum complications may be repetitive → prevent future problems.
  - Newborn weight (in grams or pounds and ounces).
    - Gives indications of gestational diabetes, fetal growth problems, shoulder dystocia, or cephalopelvic disproportion.
  - Newborn gender.
    - Provide insight into patient and family expectations + indicate certain genetic risk factors.
    - Fetal and neonatal complications.
    - Elicit problems + determine whether you need to obtain further information
    - Any problems after birth? Breathed and cried right away? Left the hospital with the mother?

4. Gynecological History:

- **Periods:** regularity.
- Contraceptive history.
- Previous infections and their treatment .
- When was the last cervical smear? Was it normal? Have there ever been any that were abnormal? If yes, what treatment has been undertaken?
  - Pap smear? Should do it every 3 years
- Previous gynecological surgery?

5. Past Medical and Surgical History:

- Relevant medical problems.
- Any previous operations? Type of anesthetic used, any complications?
- Scars → adhesions → weak uterus → may rupture during contraction → go with CS.

Obstetric History

6. Psychiatric History:

- → Postpartum blues?
- → Postpartum depression?
- → Depression unrelated to pregnancy?
- → Major psychiatric illness?

7. Family History:

- → Diabetes
- → Hypertension
- → Thromboembolic disease
- → Genetic problems
- → Psychiatric problems

8. Social History:

- → Smoking
- → Illegal drug used
- → Marital status
- → Occupation

9. Drug History:

- → Ask about heparin and aspirin in cases of bleeding.

10. Allergies

Summary

Obstetric History Summary

General Information	→ Name → Age	→ Presenting complaint (patients words not medical words) or reason for attending.
History of Current Pregnancy	→ **Gravidity:** total numbers of pregnancies regardless of how they ended. → **Parity:** number of **live births** any gestation or **stillbirths after 24 weeks** of gestation. → **Gestation (GA):** weeks calculated from ultrasound or based on LMP and the wheel. → Single / multiple (chorionicity). → **LMP:** last menstrual period.	→ **EDD:** expected date of delivery (*Naegele's rule*). → EDD = LMP + 7 days - 3 months + 1 year. → Dates as calculated from ultrasound. → Detailed of presenting problem. → Have there been any other problems in this pregnancy? to prevent recurrent. → Has there been any bleeding , contractions or loss of fluid vaginally + fetal movement?
Past Obstetric History *"List previous pregnancies & their outcomes in order"*	→ Date of delivery. → Location of delivery. → Duration of gestation (in weeks). → Correlated with birth weight → assess fetal growth. → Gestational age of any spontaneous abortion is important in any subsequent pregnancy. → Type of delivery. → Plan method of delivery in present pregnancy. → Difficult forceps delivery / cesarean delivery → review labor & delivery records. → Duration of labor (recorded in hours). → Alert an unusually long or short labor.	→ Type of anesthesia. → Note any complications of anesthesia. → Maternal complications. → UTI - vaginal bleeding - HTN - postpartum complication → maybe repetitive → prevention. → Newborn weight (*grams / pounds / ounces*). → Indications of gestational diabetes - fetal growth problems - shoulder dystocia - cephalopelvic disproportion. → Newborn gender. → Insight into patient and family expectations + genetic risk factors. → Fetal and neonatal complications. → Any problems after birth? Breathed and cried right away? Left hospital with mother?
Gynecological History	→ **Periods:** regularity. → Contraceptive history. → Previous infections & their treatment. → Previous gynecological surgery?	→ When was the last cervical smear? Normal? Abnormal? Treatment undertaken if any? → Pap smear? → Should do it every 3 years
Past Medical & Surgical History	→ Relevant medical problems. → Any previous operations? Type of anesthetic used, any complications?	→ Scars → adhesions → weak uterus → may rupture during contraction → go with CS.
Psychiatric History	→ Postpartum blues? → Postpartum depression?	→ Depression unrelated to pregnancy? → Major psychiatric illness?
Family History	→ Diabetes → Hypertension → Thromboembolic disease	→ Genetic problems → Psychiatric problems
Social History	→ Smoking → Illegal drug used	→ Marital status → Occupation
Drug History	→ Ask about heparin and aspirin in cases of bleeding.	
Allergies		
Summary		

Obstetric Physical Examination

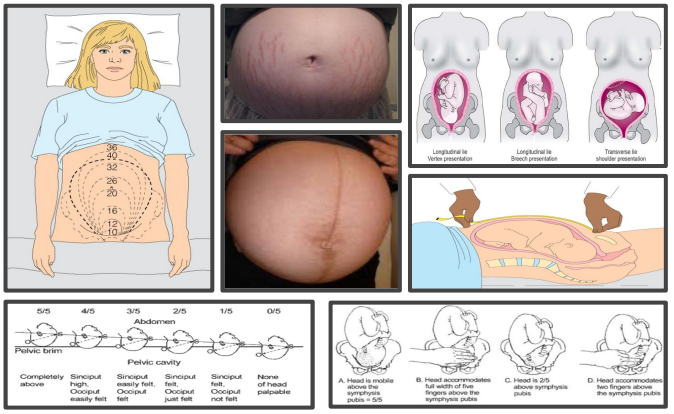
1. General Examination:

→ Weight
→ Height
→ BMI = weight (kg) / height (m^2)
→ Vital signs (blood pressure - pulse rate - respiratory rate - temperature).
→ **Cardiovascular examination:** if asymptomatic with no cardiac history → routine auscultation is unnecessary.
→ **Breast examination:**
  → Formal breast examination → unnecessary.
  → Self examination → as reliable as a general physician examination in detecting breast masses.

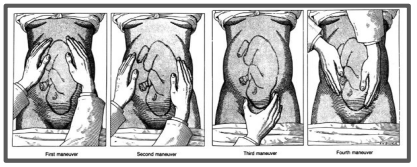
2. Abdominal Examination:

Vocabulary:
→ **Lie:** longitudinal axis of uterus to longitudinal axis of fetus (longitudinal - transverse - oblique).
→ **Presentation:** the fetus part that overlays pelvic brim (vertex - breech - shoulder).
→ **Engagement:** when the widest part of presenting part has passed successfully through pelvic inlet.

Inspection:
→ Assess shape of the uterus.
→ Asymmetry.
→ Fetal movement.
→ Surgical scars.
→ Cutaneous signs of pregnancy.
→ Linea nigra.
→ Striae gravidarum.
→ Striae albicans.
→ Flat or everted umbilicus.
→ Superficial veins.

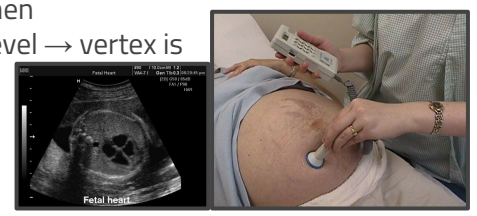


Palpation: ask about areas of tenderness before start the examination.
→ **Gestation weeks:** uterine size "symphysis → fundal height in cm".
→ **12-14 weeks:** just palpable.
→ **20-22 weeks:** at the umbilicus.



LEOPOLD Maneuvers:
→ **Fundal Grip Maneuver:** palpate **fundus** → determine the part of fetus that occupies fundus.
→ **Lateral Grip Maneuver:** palpate either **side of abdomen** → determine side of fetal back.
→ **Pawlick's Grip Maneuver:** grasping **presenting part** between thumb & 3rd finger just **above the pubic symphysis** → determine fetal part lying above pelvic inlet or lower abdomen.
→ **Pelvic Grip Maneuver:** palpating fetus' **brow and occiput** → determine fetal position in a vertex presentation.

Descent of the Fetal Head:
→ Assessed abdominally using the rule of fifth → assess the engagement.
→ **Engagement:** assess how much of the head is still felt per abdomen
  → 2/5 or less of fetal head palpated above symphysis pubis level → vertex is at or passed ischial spines level → head is engaged.



Auscultation:
→ Listening for fetal heartbeat.

3. Lower Limb Examination:

→ Swelling (edema)
→ Varicosities

4. Pelvic Examination:

→ Routine pelvic examination is **not necessary**.
→ Mostly a **speculum examination** is enough, sometimes vaginal examination is necessary.
→ Circumstances in which a **vaginal examination** is necessary:
  → Excessive or offensive discharge.
  → Vaginal bleeding (known **absence of a placenta previa**).
  → To perform cervical screen.
  → To confirm potential rupture of membrane.
→ **Digital examination** may be performed when cervix assessment is required → provide information about cervix consistency and effacement (not obtainable from a speculum examination).
  → Use Modified Bishop Score.
    → كل ما كبر الرقم كل ما كان مناسب نولدها
  → **Contraindication to digital examination:**
    → Known placenta previa.
    → Vaginal bleeding when placental site is unknown and the presenting part unengaged.
    → Prelabor rupture of the membranes (↑ risk of ascending infection).

Score	Cervical Dilation	Cervical Effacement	Station of Baby	Cervical Position	Cervical Consistency
0	closed	0-30%	-3	posterior	firm
1	1-2cm	40-50%	-2	mid-line	moderately firm
2	3-4cm	60-70%	-1,0	anterior	soft (ripe)
3	5+ cm	80+%	+1, +2		

Add 1 point to overall score for pre-eclampsia and for each prior vaginal delivery.

Subtract 1 point off overall score do postdate pregnancy, no prior births, premature or prolonged rupture of membranes (water breaking).

A score of 5 or less is said to be "unfavorable." Unfavorable scoring shows mother is a candidate for cervical ripening prior to induction. A score of 6 or higher would indicate that the cervix is ripe and induction would have a higher probability of being successful. A score of 9 or higher indicates a very high probability of induction being successful.

Modified Bishop Score, the doctor covered the text below the table in her slides. However, I kept it for reference.

Gynecological History

Steps of Obstetric History:

→ General information
→ History of present complaint (pelvic pain - vaginal discharge).
→ Menstrual history
→ Previous gynecological history
→ Previous obstetrics history
→ Enquiry about other systems (appetite - weight loss/gain - bowel function - bladder function)
→ Past medical and surgical history
→ Psychiatric history
→ Family history
→ Social history
→ Drug history
→ Allergies
→ Summary

1. General Information:

→ Name
→ Age
→ Main complaints

2. History of Present Complaint:

→ Ask detailed questions relating to each complaint.

Pelvic Pain	Vaginal Discharge
→ Site of pain? → Nature of pain? → Pain severity? → What aggravates or relieves the pain? → Relationship to menstrual cycle and intercourse? → Does the pain radiate anywhere? → Associated with bowel or bladder function?	→ Amount? → Colour? → Odour? → Presence of blood? → Relationship to menstrual cycle? → History of sexually transmitted disease or recent tests? → Any vaginal dryness?

Gynecological History

3. Menstrual History:

→ Age of menarche?
→ Usual duration of each period?
→ Length of cycle?
→ First day of the last period?
→ **Pattern of the bleeding:** regular or irregular?
→ **Amount of blood loss:** more or less than usual? number of sanitary towels or tampons used? passage of clots or flooding?
→ Any intermenstrual or postcoital bleeding?
→ Any pain relating to the period, its severity and timing of onset?
→ Any medication taken during the period?

4. Previous Gynecological History:

→ Previous treatment and surgery?
→ Date of the last cervical smear and any previous abnormalities?
→ Sexual active? difficulties or pain during intercourse?
→ The type of contraception used and any problem with it?
  → Hormonal contraceptives during early pregnancy → birth defects.
  → Retained intrauterine devices (IUDs) → early pregnancy loss - infection – premature delivery.
→ **Menopause:** Date of last period? Post menopausal bleeding? Menopausal symptoms?

5. Previous Obstetrics History:

→ Outcome & details of previous pregnancies?

6. Enquiry About Other Systems:

→ Appetite
→ Weight loss/gain
→ Bowel function
→ Bladder function

7. Past Medical & Surgical History:

→ Diabetes mellitus → affect pregnancy outcome.
→ Hypertension → affect pregnancy outcome.
→ Renal disease → affect pregnancy outcome.
→ Fractured pelvis → diminished pelvic capacity.

Gynecological History

8. Psychiatric History:

9. Family History:

- → Tumors
- → Diabetes
- → Hypertension
- → Thromboembolic disease
- → Genetic problems
- → Psychiatric problems

10. Social History:

- → The patient's contact or exposure to domesticated animals.
  - → Cats → risk of toxoplasmosis.

11. Drug History:

12. Allergies

Summary

Gynecological History Summary

<table>
<tr><td>General Information</td><td colspan="2">→ Name
→ Age
→ Main complaints</td></tr>
<tr><td rowspan="3">History of Present Complaint</td><td colspan="2">→ Ask detailed questions relating to each complaint.</td></tr>
<tr><td>Pelvic Pain</td><td>Vaginal Discharge</td></tr>
<tr><td>→ Site of pain? Nature of pain? Pain severity?
→ What aggravates or relieves the pain?
→ Relationship to menstrual cycle and intercourse?
→ Does the pain radiate anywhere?
→ Associated with bowel / bladder function?</td><td>→ Amount? Colour? Odour?
→ Presence of blood?
→ Relationship to menstrual cycle?
→ History of sexually transmitted disease or recent tests?
→ Any vaginal dryness?</td></tr>
<tr><td>Menstrual History</td><td colspan="2">→ Age of menarche?
→ Usual duration of each period?
→ Length of cycle?
→ First day of the last period?
→ Bleeding pattern: regular or irregular?
→ Intermenstrual or postcoital bleeding?
→ Amount of blood loss: more or less than usual? number of sanitary towels or tampons used? passage of clots or flooding?
→ Any pain relating to the period, its severity and timing of onset?
→ Any medication taken during the period?</td></tr>
<tr><td>Previous Gynecological History</td><td colspan="2">→ Previous treatment and surgery?
→ Sexually active? difficulties or pain during intercourse?
→ Menopause: Date of last period? Post menopausal bleeding? Menopausal Sx?
→ The type of contraception used and any problem with it?
→ Hormonal contraceptives during early pregnancy → birth defects.
→ Retained intrauterine devices (IUDs) → early pregnancy loss - infection - premature delivery.</td></tr>
<tr><td>Obstetrics History</td><td colspan="2">→ Outcome & details of previous pregnancies?</td></tr>
<tr><td>Enquiry About Other Systems</td><td colspan="2">→ Appetite
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→ Bowel function
→ Bladder function</td></tr>
<tr><td>Past Medical & Surgical History</td><td colspan="2">→ DM → affect pregnancy outcome.
→ Renal disease → affect pregnancy outcome.
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<tr><td>Allergies</td><td colspan="2"></td></tr>
<tr><td>Summary</td><td colspan="2"></td></tr>
</table>

Gynecological Physical Examination

1. General Examination:

→ Weight
→ Height
→ BMI = weight (kg) / height (m^2)
→ Vital signs (blood pressure - pulse rate - respiratory rate - temperature).
→ Hands
→ Mucous membrane
→ Supraclavicular area
→ Thyroid
→ Chest (CVS - Respiratory)
→ Breast: only if there's a compliant.

2. Abdominal Examination:

Inspection:
→ Distension.
→ Masses.
→ Hernia.
→ Surgical scars.
→ Asymmetry.
→ Superficial veins.

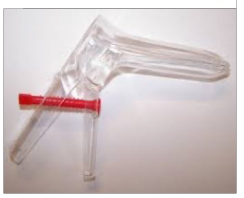
Palpation: ask about areas of tenderness before start the examination.
→ Guarding.
→ Tenderness.
→ Masses.

Percussion:
→ Useful if free fluid is suspected.

Auscultation:
→ Not specifically useful for gynecological examination.
→ Acute abdomen with bowel obstruction → listen for bowel sounds.
→ Postoperative patient with ileus → listen for bowel sounds.

Gynecological Physical Examination

3. Pelvic Examination:

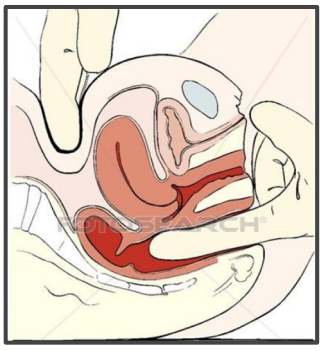


→ Not indicated in all pregnant women
→ Undiagnosed vaginal bleeding → vaginal examination is contraindicated.

Inspection:
→ External genitalia and surrounding skin.

Speculum (bivalve - cusco):
→ **Types of cervical os:**
  → **Nulliparous os:** small round dimple.
  → **Multiparous os:** smile shaped.
→ **Colour:** pink.
→ **Cervical ectropion:** an area around the os, normally redder than the pink os.
  → Tinged blue → pregnant.
  → Red → cervicitis.
→ **Secretions / discharge:**
  → Cervical mucus → ovulation.
  → Blood → menstruation.
→ Presence of growths / tumours (usually cauliflower-like and friable).
  → Cauliflower-like and friable.
  → Bleeds on touch → malignancy (*most likely*).
→ Ulcerations - scars - nabothian follicles (retention cysts).
→ Cervical/pap smear is taken at this stage.

4. Rectal / Bimanual Examination:



→ **Bimanual examination:**
  → Provides information about the uterus and adnexa (fallopian tubes and ovaries).
  → Urinary bladder should be empty, if not → internal genitalia will be difficult to delineate + uncomfortable procedure.
→ **Rectal examination:** used as alternative to a vaginal examination in children and not sexually active adults.

History:

→ **When presenting a case make sure that the first sentence consists of 4 components:**
  → Age
  → Gravidity and Parity
  → LMP
  → Chief complaint (in her own words)

→ Start presenting HPI and dissect each symptom.

Pregnancy:
→ Associated symptoms (N/V - vaginal bleeding - tiredness - ...)
→ Details of pregnancy test.

Vaginal Bleeding:
→ Duration (since when?)
→ How long does it last
→ Amount
→ Color
→ Aggravating/relieving factors (sexual intercourse - physical activity -...)
→ Associated symptoms (pain - contractions - discharge - reduced fetal movement - ...)

Vomiting:
→ Duration
→ **Amount:** how many times did you vomit?
→ What can you tolerate orally? (solids / fluids) "*asses dehydration*".
→ Associated symptoms.

Absent Fetal Movement:
→ Since when?
→ How often do you feel it?
→ Medication history?
→ Related to position?

Pelvic Pain "SOCRATES":

"*mostly asymptomatic, a little nausea, no vomiting*"

History:

"A 34 year old lady, G2P2, LMP was 7 weeks ago. she thinks that she's pregnant"

→ Details about each pregnancy (spontaneous or assisted) and delivery:
  → **G1:** spontaneous vaginal delivery (SVD), at term, healthy baby, no complications
  → **G2:** caesarean section (C/S) for breech, at term, no complications
  → **G3:** current pregnancy

→ **Common complications:**
  → Preterm
  → PROM
  → Chorioamnionitis
  → Instrumental delivery
  → PPH
  → Inquire details about the cause (reversible/ irreversible) + type of incision (upper / lower segment) of C/S → decide whether or not VBAC is applicable for this pregnancy.

Medical History:
→ **OB relevant medical conditions:** DM - HTN - hypothyroidism - epilepsy - autoimmune diseases - DVT.
  → "She is medically free".
  → "She is a diabetic for 7 years, on insulin, controlled".

Surgical History:
→ Gynecological (C/S - myomectomy - cerclage - D&C - ...)
  → "Not significant except for one c/s"
→ Abdominal surgeries

Gynecological History:
→ When you present obstetric case, mention gynecological history after medical and surgical history, and when you present gynecological case, mention obstetric history after medical and surgical.
  → LMP
  → Regularity (every month)
  → How many days does last?
  → Severity
  → How many pads/day?
  → Associated symptoms (dysmenorrhea - menorrhagia -...)
  → Contraception methods
  → Last pap smear (ask more if abnormal, advice to repeat if +3 years ago)
→ You can either say insignificant if it was regular or say the full history.
  → "Her menstrual cycle is regular, monthly every 28 - 30 days, last for 7 days, she used contraception and stopped one year ago, her latest pap smear was normal 2 years ago"

Medications & Allergies:
→ To look for teratogenic medications
  → "No medications except for contraception which she stopped a year ago, no known allergies"

Social History:
→ Marital status
→ Socioeconomic status
→ Smoking
→ Alcohol
→ Substance abuse
→ Diet
→ Activity
→ Family history

Quiz

Question 1:

→ **In the booking clinic, you had a patient history is P4+0. which of the following describes her obstetric history?**

A. She has 4 vaginal deliveries
B. She has 4 living children
C. She has 4 full term deliveries
D. She has 4 deliveries beyond 24 weeks

Question 2:

→ **28-March-2021, calculate EDD:**

A. 5 /1 / 2022
B. 4 /1 / 2021
C. 5 /1 / 2021
D. 2 /1 / 2021

Question 3:

→ **While taking an obstetrical history, you told your consultant that your patient is gravida 3, what does gravidity mean?**

A. Number of her living child
B. Number of term deliveries
C. Number of all pregnancies
D. Number of abortions

Question 4:

→ **A 29-year-old woman with 10 weeks amenorrhea and a positive pregnancy test. Her past obstetric history revealed that she had 5 full term vaginal deliveries. one preterm delivery at 30 weeks. One first trimester abortion and one ectopic pregnancy. Which one of the following describes her Gravidity and parity?**

A. G9P5 +2
B. G5P5 +1
C. G7P5 +2
D. G5P5 +2

1	2	3	4
D	A	C	A

Reference

CHAPTER 2

Clinical Approach to the Patient

JOSEPH C. GAMBONE

CLINICAL KEYS FOR THIS CHAPTER

- The clinical approach to obstetric and gynecologic patients requires sensitivity and an understanding that medical issues related to birth and reproductive care require a trusting relationship between a woman and her obstetrician and gynecologist as well as all health care professionals that she may encounter.
- Recent changes in the acceptance of sexual roles in society mean that a nonjudgmental approach is needed. The physician should be careful not to assume that a casual and overly familiar approach is always acceptable to all patients, especially older ones.
- The obstetric history and physical examination should be complete and carefully performed with the goal of providing care that results in the best clinical outcomes for the mother and her child.
- The gynecologic encounter may be for routine preventive care or may be to address a specific clinical problem that a woman may be having. Reproductive matters are of most interest during the early adult years. Concerns about chronic disorders typically arise later in life during the pre- and postmenopausal years.
- The physician and all health care professionals should be aware that certain groups of women, such as the pediatric, geriatric, and disabled, have special needs and concerns. Women who are in same-sex relationships and transgender women may also have special needs.

A careful history and physical examination should form the basis for patient evaluation and clinical management in obstetrics and gynecology, as in other clinical disciplines. This chapter outlines the essential details of the clinical approach to, and evaluation of, the obstetric and gynecologic patient. The clinical approach to female patients has evolved in recent years (see Chapter 28). It is important for the clinician who cares for women to refrain from making value judgments about sexual preferences and behavior, unless they are clearly unhealthy or dangerous. Some patients may have special needs in terms of their clinical care, and an accepting and understanding attitude is important. Pediatric and adolescent patients, the geriatric patient, as well as women with disabilities, also have unique gynecologic and reproductive needs and this chapter concludes with information about their evaluation and management.

Obstetric and Gynecologic Evaluation

In few areas of medicine is it necessary to be more sensitive to the emotional and psychological needs of the patient than in obstetrics and gynecology. By their very nature, the history and physical examination may cause embarrassment to some patients. The members of the medical care team are individually and collectively responsible for ensuring that each patient's privacy and modesty are respected while providing the highest level of medical care. Box 2-1 lists the appropriate steps for the clinical approach to the patient.

While a casual and familiar approach may be acceptable to many younger patients, it may offend others and be quite inappropriate for many older patients. Different circumstances with the same patient may dictate different levels of formality. Entrance to the patient's room should be announced by a knock and spoken identification. A personal introduction with the stated reason for the visit should occur before any questions are asked or an examination is begun. The placement of the examination table should always be in a position that maximizes privacy for the patient as other health care professionals enter the room. Any cultural beliefs and preferences for care and treatment should be recognized and respected.

BOX 2-1

APPROACH TO THE PATIENT

The doctor should always:

- Knock before entering the patient's room.
- Identify himself/herself.
- Meet the patient initially when she is fully dressed, if possible.
- Address the patient courteously and respectfully.
- Respect the patient's privacy and modesty during the interview and examination.
- Ensure cleanliness, good grooming, and good manners in all patient encounters.
- Beware that a casual and familiar approach is not acceptable to all patients; it is generally best to avoid addressing an adult patient by her first name.
- Maintain the privacy of the patient's medical information and records.
- Be mindful and respectful of any cultural preferences.

Obstetric History

A complete history must be recorded at the time of the prepregnancy evaluation or at the initial antenatal visit. Several detailed standardized forms are available, but this should not negate the need for a detailed chronologic history taken personally by the physician who will be caring for the patient throughout her pregnancy. While taking the history, major opportunities will usually arise to provide counseling and explanations that serve to establish rapport and a supportive patient/physician encounter.

PREVIOUS PREGNANCIES

Each prior pregnancy should be reviewed in chronologic order and the following information recorded:

1. **Date of delivery** (or pregnancy termination).
2. **Location of delivery** (or pregnancy termination).
3. **Duration of gestation** (recorded in weeks). When correlated with birth weight, this information allows an assessment of fetal growth patterns. The gestational age of any spontaneous abortion is of importance in any subsequent pregnancy.
4. **Type of delivery** (or method of terminating pregnancy). This information is important for planning the method of delivery in the present pregnancy. A difficult forceps delivery or a cesarean delivery may require a personal review of the labor and delivery records.
5. **Duration of labor** (recorded in hours). This may alert the physician to the possibility of an unusually long or short labor.
6. **Type of anesthesia.** Any complications of anesthesia should be noted.
7. **Maternal complications.** Urinary tract infections, vaginal bleeding, hypertension, and postpartum complications may be repetitive; such knowledge is helpful in anticipating and preventing problems with the present pregnancy.
8. **Newborn weight** (in grams or pounds and ounces). This information may give indications of gestational diabetes, fetal growth problems, shoulder dystocia, or cephalopelvic disproportion.
9. **Newborn gender.** This may provide insight into patient and family expectations and may indicate certain genetic risk factors.
10. **Fetal and neonatal complications.** Certain questions should be asked to elicit any problems and to determine the need to obtain further information. Inquiry should be made as to whether the baby had any problems after it was born, whether the baby breathed and cried right away, and whether the baby left the hospital with the mother.

MENSTRUAL HISTORY

A good menstrual history is essential because it is the determinant for establishing the expected date of confinement (EDC). A modification of **Nägele rule** for establishing the EDC is to add 9 months and 7 days to the first day of the last normal menstrual period (LMP). For example:

LMP: July 20, 2015
EDC: April 27, 2016

This calculation assumes a normal 28-day cycle, and adjustments must be made for longer or shorter cycles. Any bleeding or spotting since the last normal menstrual period should be reviewed in detail and taken into account when calculating an EDC.

CONTRACEPTIVE HISTORY

This information is important for risk assessment. Hormonal contraceptives taken during early pregnancy have been associated with birth defects, and retained intrauterine devices (IUDs) can cause early pregnancy loss, infection, and premature delivery.

MEDICAL HISTORY

The importance of a good medical history cannot be overemphasized. In addition to common disorders, such as diabetes mellitus, hypertension, and renal disease, which are known to affect pregnancy outcome, all serious medical conditions should be recorded.

SURGICAL HISTORY

Each surgical procedure should be recorded chronologically, including date, hospital, surgeon, and complications. Trauma must also be listed (e.g., a fractured pelvis may result in diminished pelvic capacity).

SOCIAL HISTORY

Habits such as smoking, alcohol use, and other substance abuse are important factors that must be recorded and managed appropriately. The patient's contact or exposure to domesticated animals, particularly cats (which carry a risk of toxoplasmosis), is important.

The patient's type of work and lifestyle may affect the pregnancy. Exposure to solvents (carbon tetrachloride) or insulators (polychlorobromine compounds) in the workplace may lead to teratogenesis or hepatic toxicity.

Obstetric Physical Examination

GENERAL PHYSICAL EXAMINATION

This procedure must be systematic and thorough and performed as early as possible in the prenatal period. A complete physical examination provides an opportunity to detect previously unrecognized abnormalities. Normal baseline levels must also be established, particularly those of weight, blood pressure, funduscopic (retina) appearance, and cardiac status.

PELVIC EXAMINATION

The initial pelvic examination should be done early in the prenatal period and should include the following: (1) inspection of the external genitalia, vagina, and cervix; (2) collection of cytologic specimens from the exocervix (or ectocervix) and superficial endocervical canal; and (3) palpation of the cervix, uterus, and adnexa. The initial estimate of gestational age by uterine size becomes less accurate as pregnancy progresses. Rectal and rectovaginal examinations are also important aspects of this initial pelvic evaluation.

CLINICAL PELVIMETRY

This assessment, which is helpful for predicting potential problems during labor, should be carried out following the bimanual pelvic examination and before the rectal examination. It is important that clinical pelvimetry be carried out systematically. The details of clinical pelvimetry are described in Chapter 8.

Diagnosis of Pregnancy

The diagnosis of pregnancy and its location, based on physical signs and examination alone, may be quite challenging during the early weeks after a missed menses. Urine pregnancy tests in the office are reliable a few days after the first missed period, and office ultrasonography is used increasingly as a routine.

SYMPTOMS OF PREGNANCY

The most common symptoms in the early months of pregnancy are missed menses, urinary frequency, breast engorgement, nausea, tiredness, and easy fatigability. A missed or abnormal menses in a previously normally menstruating, sexually active woman should be considered to be caused by pregnancy until proven otherwise. Urinary frequency is most likely caused by the pressure of the enlarged uterus on the bladder.

SIGNS OF PREGNANCY

The signs of pregnancy may be divided into presumptive, probable, and positive.

Presumptive Signs

The presumptive signs are primarily those associated with skin and mucous membrane changes. Discoloration and cyanosis of the vulva, vagina, and cervix are related to the generalized engorgement of the pelvic organs and are, therefore, nonspecific. The dark discoloration of the vulva and vaginal walls is known as **Chadwick sign.** Pigmentation of the skin and abdominal striae are nonspecific and unreliable signs. The most common sites for pigmentation are the midline of the lower abdomen (linea nigra), over the bridge of the nose, and under the eyes. Pigmentation under the eyes is called chloasma or the mask of pregnancy. Chloasma is also an occasional side effect of hormonal contraceptives.

Probable Signs

The probable signs of pregnancy are those mainly related to the detectable physical changes in the uterus. During early pregnancy, the uterus changes in size, shape, and consistency. Early uterine enlargement tends to be in the anteroposterior diameter so that the uterus becomes globular. In addition, because of asymmetric implantation of the ovum, one cornu of the uterus may enlarge slightly **(Piskaçek sign).** Uterine consistency becomes softer, and it may be possible to palpate or to compress the connection between the cervix and fundus. This change is referred to as **Hegar sign.** The cervix also begins to soften early in pregnancy.

Positive Signs

The positive signs of pregnancy include the detection of a fetal heartbeat and the recognition of fetal movements. Endovaginal ultrasound is capable of detecting fetal cardiac activity as early as 6 weeks (from last menses) and fetal movement from about 7 to 8 weeks' gestation. Modern Doppler techniques for detecting the fetal heartbeat may be successful as early as 9 weeks and are nearly always positive by 12 weeks. Fetal heart tones can usually be detected with a stethoscope between 16 and 20 weeks. The multiparous woman generally recognizes fetal movements between 15 and 17 weeks, whereas the primigravida usually does not recognize fetal movements until 18 to 20 weeks.

LABORATORY TESTS FOR PREGNANCY

Pregnancy Tests

Tests to detect pregnancy have revolutionized early diagnosis. Although they are considered a probable sign of pregnancy, the accuracy of these tests is very good. All commonly used methods depend on the detection of human chorionic gonadotropin (hCG) or its β subunit in urine or serum. Depending on the specific sensitivity of the test, pregnancy may be suspected even prior to a missed menstrual period.

Diagnostic Ultrasonography

The imaging technique of ultrasonography has made a significant contribution to the diagnosis and evaluation of pregnancy. Using real-time ultrasonography, an intrauterine gestational sac can be identified at 5 menstrual weeks (21st postovulatory day) and a fetal image can be detected by 5 to 6 weeks. A beating heart is noted at 7 weeks or even sooner with the latest equipment.

Gynecologic History

Gynecologic history-taking must be systematic to avoid omissions, and it should be conducted with sensitivity and without haste.

PRESENT ILLNESS

The patient is asked to state her main complaint and to relate her present illness, sequentially, in her own words. Pertinent negative information should be recorded, and, as much as possible, questions should be reserved until after the patient has described the course of her illness. Generally, the history provides substantial clues to the diagnosis, so it is important to evaluate fully the more common symptoms encountered in gynecologic patients.

Abnormal Vaginal Bleeding

Vaginal bleeding before the age of 9 years and after the age of 52 years is cause for concern and requires investigation. These are the general limits of normal menstruation, and although the occasional woman may menstruate regularly and normally up to the age of 57 or 58 years, it is important to ensure that she is not bleeding from uterine cancer or from exogenous estrogens. Prolongation of menses beyond 7 days or bleeding between menses may connote abnormal ovarian function, uterine myomata, or endometriosis.

Abdominal Pain

Many gynecologic problems are associated with abdominal pain. The common gynecologic causes of acute lower abdominal pain are salpingo-oophoritis with peritoneal inflammation, torsion and infarction of an ovarian cyst, endometriosis, or rupture of an ectopic pregnancy. Patterns of pain radiation should be recorded and may provide an important diagnostic clue. Chronic lower abdominal pain is generally associated with endometriosis, chronic pelvic inflammatory disease, or large pelvic tumors. It may also be the first symptom of ovarian cancer.

Amenorrhea

The most common causes of amenorrhea are pregnancy and the normal menopause. It is abnormal for a young woman to reach the age of 16 without menstruating (primary amenorrhea). Pregnancy should be suspected in a woman between 15 and 45 years of age who fails to menstruate within 35 days from the first day of her last menstruation. In a patient with amenorrhea who is not pregnant, inquiry should be made about menopausal or climacteric symptoms such as hot flashes, vaginal dryness, or mild depression.

Other Symptoms

Other pertinent symptoms of concern include dysmenorrhea, premenstrual tension, fluid retention, leukorrhea, constipation, dyschezia, dyspareunia, and abdominal distention. Lower back and sacral pain may indicate uterine prolapse, enterocele, or rectocele.

MENSTRUAL HISTORY

The menstrual history should include the age at menarche (average is 12 to 13 years), interval between periods (21 to 35 days with a median of 28 days), duration of menses (average is 5 days), and character of the flow (scant, normal, heavy, usually without clots). Any intermenstrual bleeding (metrorrhagia) should be noted. The date of onset of the LMP and the date of the previous menstrual period should be recorded. Inquiry should be made regarding menstrual cramps (dysmenorrhea); if present, the age at onset, severity, and character of the cramps should be recorded, together with an estimate of the disability incurred. Midcycle pain *(mittelschmerz)* and a midcycle increase in vaginal secretions are usually indicative of ovulatory cycles.

CONTRACEPTIVE HISTORY

The type and duration of each contraceptive method must be recorded, along with any attendant complications. These may include amenorrhea or thromboembolic disease with hormonal contraceptives; dysmenorrhea, heavy bleeding (menorrhagia), or pelvic infection with the intrauterine device; or contraceptive failure with the diaphragm, or other barrier method.

Reference

OBSTETRIC HISTORY

Each pregnancy, delivery, and any associated complications should be listed sequentially with relevant details and dates.

SEXUAL HISTORY

The health of, and current relationship with, the husband or partner(s) may provide insight into the present complaints. Inquiry should be made regarding any pain (dyspareunia), bleeding, or dysuria associated with sexual intercourse. Sexual satisfaction should be discussed tactfully.

PAST HISTORY

As in the obstetric history, any significant past medical or surgical history should be recorded, as should the patient's family history. A list of current medications is important.

SYSTEMIC REVIEW

A review of all other organ systems should be undertaken. Habits (tobacco, alcohol, other substance abuse), medications, usual weight with recent changes, and loss of height (osteoporosis) are important parts of the systemic review.

Gynecologic Physical Examination

GENERAL PHYSICAL EXAMINATION

A complete physical examination should be performed on each new patient and repeated at least annually. The initial examination should include the patient's height, weight, and arm span (in adolescent patients or those with endocrine problems) and should be carried out with the patient completely disrobed but suitably draped. A body mass index (BMI) should be calculated (Box 2-2) and recorded. The examination should be systematic and should include the following points.

Vital Signs

Temperature, pulse rate, respiratory rate, and blood pressure should be recorded.

BOX 2-2

CALCULATIONS AND DESIGNATIONS OF BODY MASS INDEX

Body mass index is calculated by dividing weight in kilograms (kg) by height in meters squared or weight in pounds by height in inches squared times 703.

- Less than 18.5 = underweight
- 18.5 to 25 = normal weight
- 25 to 29.9 = overweight
- 30 to 34.9 = class one obesity
- 35 to 39.9 = class two obesity
- 40 or greater = extreme obesity

*Data from the National Heart, Lung, and Blood Institute.

General Appearance

The patient's body build, posture, state of nutrition, demeanor, and state of well-being should be recorded.

Head and Neck

Evidence of supraclavicular lymphadenopathy, oral lesions, webbing of the neck, or goiter may be pertinent to the gynecologic assessment.

Breasts

The breast examination is particularly important in gynecologic patients (see Chapters 30 and 32).

Heart and Lungs

Examination of the heart and lungs is of importance, particularly in a patient who requires surgery. The presence of a pleural effusion may be indicative of a disseminated malignancy, particularly ovarian cancer.

Abdomen

Examination of the abdomen is critical in the evaluation of the gynecologic patient. The contour, whether flat, scaphoid, or protuberant, should be noted. The protuberant appearance may suggest ascites. The presence and distribution of hair, especially in the area of the escutcheon, should be recorded, as should the presence of striae or operative scars.

Abdominal tenderness must be determined by placing one hand flat against the abdomen in the nonpainful areas initially, then gently and gradually exerting pressure with the fingers of the other hand (Figure 2-1). Rebound tenderness (a sign of peritoneal irritation), muscle guarding, and abdominal rigidity should be gently elicited, again first in the nontender areas. A "doughy" abdomen, in which the guarding increases gradually as the pressure of palpation is increased, is often seen with a hemoperitoneum.

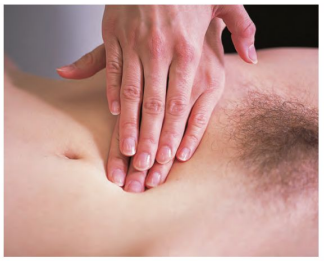


FIGURE 2-1 The abdomen is palpated by placing the left palm flat against the abdominal wall and then gently exerting pressure with the fingers of the right hand.

It is important to palpate any abdominal mass. The size should be specifically noted. Other characteristics may be even more important in suggesting the diagnosis, such as whether the mass is cystic or solid, smooth or nodular, fixed or mobile, and whether it is associated with ascites. In determining the reason for abdominal distention (tumor, ascites, or distended bowel), it is important to percuss carefully the areas of tympany (gaseous distention) and dullness. A large tumor is generally dull on top with loops of bowel displaced to the flanks. Dullness that shifts as the patient turns onto her side **(shifting dullness) is suggestive of ascites.**

Back

Abnormal curvature of the vertebral column (dorsal kyphosis or scoliosis) is an important observation in evaluating osteoporosis in a postmenopausal woman. Costovertebral angle tenderness suggests pyelonephritis, whereas psoas muscle spasm, which is associated with flexion of the hip, may occur with gynecologic infections, malignant infiltration, or acute appendicitis.

Extremities

The presence or absence of varicosities, edema, pedal pulsations, and cutaneous lesions may suggest pathologic conditions within the pelvis. The height of pitting edema should be noted (e.g., ankle, shin, to the knee, or above).

PELVIC EXAMINATION

The pelvic examination must be conducted systematically and with careful sensitivity. The procedure should be performed with smooth and gentle movements and accompanied by reasonable explanations.

Vulva

The character and distribution of hair, the degree of development or atrophy of the labia, and the character of the hymen (imperforate or cribriform) and introitus (virginal, nulliparous, or multiparous) should be noted. Any clitorimegaly should be noted, as should the presence of cysts, tumors, or inflammation of the **Bartholin gland.** The urethra and **Skene glands** should be inspected for any purulent exudates. The labia should be inspected for any inflammatory, dystrophic, or neoplastic lesions. Perineal relaxation and scarring should be noted because they may cause dyspareunia and defects in anal sphincter tone. The urethra should be "milked" for any inflammatory exudates, which if found should be cultured for pathologic organisms.

Speculum Examination

It is important to use an appropriately sized speculum (Figure 2-2), which should be warmed and lubricated with warm water only, so as not to interfere with the examination of cervical cytology or any vaginal exudate. After gently spreading the labia to expose the introitus, the speculum should be inserted with the blades entering the introitus transversely, then directed posteriorly in the axis of the vagina with pressure exerted against the relatively insensitive perineum to avoid contacting the sensitive urethra. As the anterior blade reaches the cervix, the speculum is opened to bring the cervix into view (Figure 2-3). As the vaginal epithelium is inspected, it is important to rotate the speculum through 90 degrees, so that lesions on the anterior or posterior walls of the vagina ordinarily covered by the blades of the speculum are not overlooked. Vaginal wall relaxation should be evaluated using either a Sims speculum or the posterior blade of a bivalve speculum. The patient is asked to bear down **(Valsalva maneuver)** or to cough to demonstrate any stress incontinence. If the patient's complaint involves urinary stress or urgency, this portion of the examination should be carried out before the bladder is emptied.

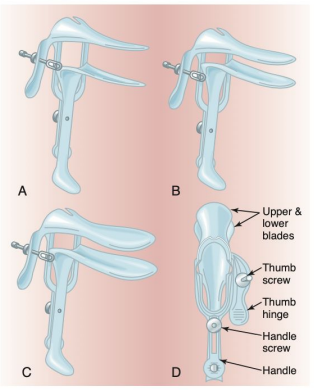


FIGURE 2-2 **A,** Pediatric speculum. **B,** Pederson speculum. **C,** Graves speculum. The Pederson speculum has narrower blades and is more appropriate for examining a nulliparous patient. **D,** Parts of a speculum.

The cervix should be inspected to determine its size, shape, and color. The nulliparous patient generally has a conical, unscarred cervix with a circular, centrally placed os; the multiparous cervix is generally bulbous

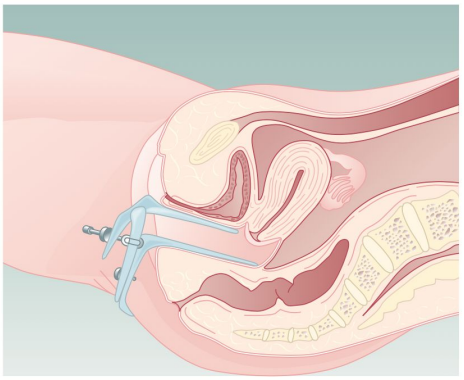


FIGURE 2-3 Proper insertion of the speculum so that the uterine cervix may be visualized.

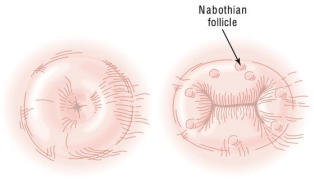


FIGURE 2-4 Cervix of a nulliparous patient **(A)** and a multiparous patient **(B).** Note the circular os in the nulliparous cervix and the transverse os, resulting from lacerations at childbirth, in the multiparous cervix.

and the os has a transverse configuration (Figure 2-4). Any purulent cervical discharge should be cultured. Plugged, distended cervical glands **(nabothian follicles)** may be seen on the exocervix (or ectocervix). In premenopausal women, the squamocolumnar junction of the cervix is usually visible around the cervical os, particularly in patients of low parity. Postmenopausally, the junction is invariably retracted within the endocervical canal. A cervical cytologic smear (Papanicolaou, or Pap, smear), liquid-based sampling, or DNA probe for human papillomavirus (HPV) should be taken before the speculum is withdrawn. For the traditional Pap smear the exocervix (or ectocervix) is gently scraped with a wooden spatulum or plastic broom, and the endocervical tissue gently sampled with a cytobrush.

Bimanual Examination

The bimanual pelvic examination provides information about the uterus and adnexa (fallopian tubes and ovaries). During this portion of the examination, the urinary bladder should be empty; if it is not, the internal genitalia will be difficult to delineate, and the procedure is more apt to be uncomfortable for the patient. The labia are separated, and the gloved, lubricated index finger is inserted into the vagina, avoiding the sensitive urethral meatus. Pressure is exerted posteriorly against the perineum and puborectalis muscle, which causes the introitus to gape somewhat, thereby usually allowing the middle finger to be inserted as well. Intromission of the two fingers into the depth of the vagina may be facilitated by having the patient bear down slightly. **If insertion of two fingers causes undue patient discomfort, examination with the index finger alone may give more information.**

The cervix is palpated for consistency, contour, size, and tenderness to motion. **If the vaginal fornices are absent, as may occur in postmenopausal women, it is not possible to appreciate the size of the cervix on bimanual examination. This can be determined only on rectovaginal or rectal examination.**

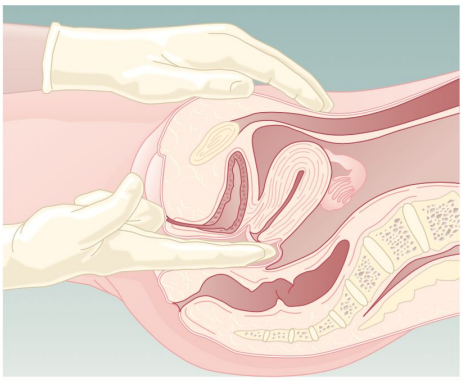


FIGURE 2-5 Bimanual evaluation of the uterus by exerting gentle pressure on the uterus with the vaginal fingers against the abdominal hand.

The uterus is evaluated by placing the abdominal hand flat on the abdomen with the fingers pressing gently just above the symphysis pubis. With the vaginal fingers supinated in either the anterior or the posterior vaginal fornix, the uterine corpus is pressed gently against the abdominal hand (Figure 2-5). As the uterus is felt between the examining fingers of both hands, the size, configuration, consistency, and mobility of the organ are appreciated. If the muscles of the abdominal wall are not compliant or if the uterus is retroverted, the outline, consistency, and mobility must be determined by ballottement with the vaginal fingers in the fornices; in these circumstances, however, it is impossible to discern uterine size accurately.

By shifting the abdominal hand to either side of the midline and gently elevating the lateral fornix up to the abdominal hand, it may be possible to outline a right adnexal mass (Figure 2-6). The left adnexa are best appreciated with the fingers of the left hand in the vagina (Figure 2-7). The examiner should stand sideways, facing the patient's left, with the left hip maintaining pressure against the left elbow, thereby

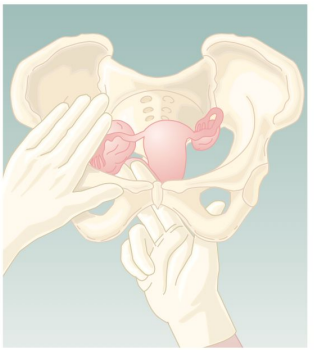


FIGURE 2-6 Bimanual examination of the right adnexa. Note that fingers of the right hand are in the vagina.

Reference

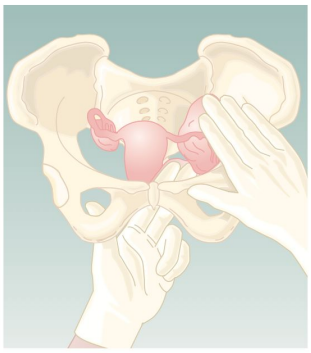


FIGURE 2-7 Bimanual examination of the left adnexa. Note that fingers of the left hand are in the vagina.

providing better tactile sensation because of the relaxed musculature in the forearm and examining hand. The **pouch of Douglas** is also carefully assessed for nodularity or tenderness, as may occur with endometriosis, pelvic inflammatory disease, or metastatic carcinoma.

It is usually impossible to feel the normal tube, and conditions must be optimal to appreciate the normal ovary. The normal ovary has the size and consistency of a shelled oyster and may be felt with the vaginal fingers as they are passed across the undersurface of the abdominal hand. The ovaries are very tender to compression, and the patient is uncomfortably aware of any ovarian compression or movement during the examination.

It may be impossible to differentiate between an ovarian or tubal mass or even a lateral uterine mass. Generally, left adnexal masses are more difficult to evaluate than those on the right because of the position of the sigmoid colon on the left side of the pelvis. An ultrasonic examination should be helpful for delineating these features.

RECTAL EXAMINATION

The anus should be inspected for lesions, hemorrhoids, or inflammation. Rectal sphincter tone should be recorded and any mucosal lesions noted. A guaiac test should be performed to determine the presence of occult blood.

A rectovaginal examination is helpful in evaluating masses in the cul-de-sac, the rectovaginal septum, or adnexa. It is essential in evaluating the parametrium in patients with cervical cancer. Rectal examination may also be essential in differentiating between a rectocele and an enterocele (Figure 2-8).

LABORATORY EVALUATION

Appropriate laboratory tests normally include a urinalysis, complete blood count, erythrocyte sedimentation rate, and blood chemistry analyses. Special tests, such as tumor marker and hormone assays, are performed when indicated.

ASSESSMENT

A reasonable differential diagnosis should be possible with the information gleaned from the history, physical examination, and laboratory tests. The plan of management should aim toward a chemical or histologic confirmation of the presumptive diagnosis, and the appropriate therapeutic options, along with the rationale for each option, should be recorded.

Patients with Special Needs

PEDIATRIC AND ADOLESCENT PATIENTS

Girls experience fewer gynecologic problems than do adult women, but their concerns need to be met effectively and skillfully in a way that will allay anxiety and create a positive attitude toward their gynecologic health. Unique complaints fall generally into a handful of categories: congenital anomalies, genital injuries, inflammation of the nonestrogenized genital tract, pubertal problems, and psychosexual concerns. Genital ambiguity, trauma, and vaginal bleeding in the prepubertal child are covered briefly in this chapter.

GENITAL AMBIGUITY

Dealing with genital ambiguity in the newborn requires a coordinated and timely response. **The family's psychological well-being must be addressed because they must feel confident in the gender identity of their child.** Ambiguity can result from masculinization of a female child due to exogenous hormone ingestion or maternal or fetal overproduction of androgen. It may also result from incomplete virilization of a male infant, hormonal insensitivity, gonadal dysgenesis, or chromosomal anomalies (see Chapters 18 and 20). **When assessing an infant with ambiguous genitalia, fluid and electrolyte balance should be monitored and blood drawn for 17-hydroxyprogesterone and cortisol to rule out 21-hydroxylase deficiency.** Life-threatening illness may be missed in children with the salt-losing form of congenital adrenal hyperplasia (see Chapter 33).

TRAUMA

Straddle injuries are the most common cause of trauma to the genitalia of a young girl, and the injuries have a seasonal peak when bicycles come out in the spring. The majority of these injuries are to the labia. Penetrating vaginal injuries can cause major intraabdominal damage with minimal external findings. **Sexual assault must always be considered.** After a life-threatening condition is ruled out, an ice pack, chilled bag of intravenous solution, or cool compress may be applied to the injured area and the child allowed to rest quietly for 20 minutes before being assessed further. Extensive injuries usually require examination under anesthesia and surgical repair.

In any case of trauma, concurrent damage to the rectum or urinary tract should be considered. **If there is any reason to suspect sexual or physical abuse, the child protection authorities must be notified, and the examination should include the collection of medicolegal evidence.**

VAGINAL BLEEDING IN THE PREPUBERTAL CHILD

Vaginal bleeding is a frequent and distressing complaint in childhood. Although it will most often be of benign etiology, more serious pathology must always be ruled out. Vaginal bleeding in the newborn is most often physiologic as a result of maternal estrogen withdrawal. In such cases, there should be supportive evidence of a hormonal effect, such as the presence of breast tissue and pale, engorged vaginal epithelium. Bleeding disorders are uncommon in this age group but should be considered. Vitamin K is routinely given to the newborn, but some parents may refuse the medication.

Precocious puberty (see Chapter 32) may present with vaginal bleeding, although most commonly other evidence of maturation will have preceded the bleeding and will be evident on examination. At the very least, a pale, estrogenized vaginal epithelium will be seen, and cytology from the vagina will confirm the hormonal effect. Transient precocious puberty may occur in response to a **functional ovarian cyst,** and vaginal bleeding may be triggered by the spontaneous resolution of the cyst. **Exogenous hormonal exposure** should be considered, because children have been known to ingest birth control pills. **Ovarian tumors** resulting in pseudoprecocious puberty should be ruled out.

Vulvovaginitis is common but is a diagnosis of exclusion. When bleeding is present, it is necessary to assess the vagina and to rule out a foreign body or vaginal tumor.

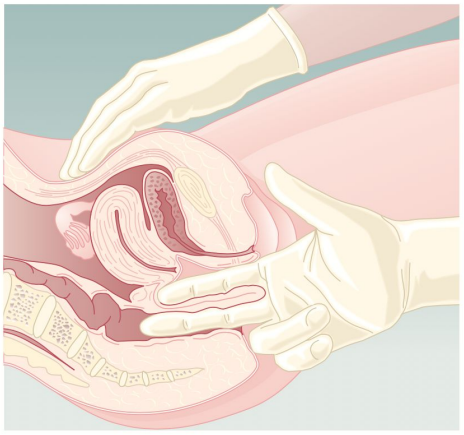


FIGURE 2-8 Rectovaginal bimanual examination. During the Valsalva maneuver, an enterocele will separate the two fingers.

Vaginal tumors are the most serious possibility to be considered. **Sarcoma botryoides** classically presents with vaginal bleeding and grapelike vesicles. Fortunately, this is a rare tumor.

Geriatric Patients

The gynecologic assessment of the elderly woman may present a special challenge. Many older patients tend to underreport their symptoms, possibly because of a belief that any new physical problems are due to the normal aging process. Also, a fear of loss of their independence may contribute to this denial and this may lead to a delay of diagnosis and perhaps a worse prognosis. In addition to the routine gynecologic history and physical examination, these patients should be evaluated for any sensory impairments, such as visual or hearing loss, any impaired mobility, malnutrition, urinary incontinence, or confusion, which may be due to polypharmacy. Appropriate referral, when improvement can be reasonably expected, should be considered for these problems once identified.

Gynecologic conditions such as atrophic vaginitis, uterine and vaginal prolapse, and genital tract malignancies are among the more common problems encountered in the geriatric patient.

Patients with Disabilities

Women with developmental or acquired disabilities should receive the same high quality obstetric and gynecologic care as anyone else, with a goal of sustaining their best level of functioning. Assisting families of mentally or physically disabled individuals with obstetric or gynecologic problems or attending for them in special institutions can be quite challenging. The woman with a disability is a person with special and unique needs, and communicating to her a sense of caring and respect is paramount.

Lesbian, Gay, Bisexual, and Transgender Patients

This group of patients is composed of **l**esbian, **g**ay, **b**isexual, and **t**ransgender women and men and is known as **LGBT**. There is now recognition that women who are in a same-sex intimate relationship, as well as those who are transgender, need special consideration and understanding for the health issues that they may encounter. The U.S. Office of Prevention and Health Promotion points out that LGBT individuals, possibly because of the discrimination that they encounter, have higher rates of psychiatric disorders, substance abuse, and suicide. The obstetrician and gynecologist should be particularly sensitive to the needs that these women may have regarding their reproductive health. More information about the health disparities that the LGBT community may have can be found at www.healthypeople.gov/LGBT. For more detailed information about the specific needs that lesbian and transgender women may have, the American College of Obstetricians and Gynecologists Committee Opinion Number 525, dated May 2012 and reaffirmed in 2014, can be consulted at www.ACOG.org.

increases gradually as the pressure of palpation is increased, is often seen with a hemoperitoneum.

It is important to palpate any abdominal mass. The size should be specifically noted. Other characteristics may be even more important in suggesting the diagnosis, such as whether the mass is cystic or solid, smooth or nodular, fixed or mobile, and whether it is associated with ascites. In determining the reason for abdominal distention (tumor, ascites, or distended bowel), it is important to percuss carefully the areas of tympany (gaseous distention) and dullness. A large tumor is generally dull on top with loops of bowel displaced to the flanks. Dullness that shifts as the patient turns onto her side **(shifting dullness) is suggestive of ascites.**

Back

Abnormal curvature of the vertebral column (dorsal kyphosis or scoliosis) is an important observation in evaluating osteoporosis in a postmenopausal woman. Costovertebral angle tenderness suggests pyelonephritis, whereas psoas muscle spasm, which is associated with flexion of the hip, may occur with gynecologic infections, malignant infiltration, or acute appendicitis.

Extremities

The presence or absence of varicosities, edema, pedal pulsations, and cutaneous lesions may suggest pathologic conditions within the pelvis. The height of pitting edema should be noted (e.g., ankle, shin, to the knee, or above).

PELVIC EXAMINATION

The pelvic examination must be conducted systematically and with careful sensitivity. The procedure should be performed with smooth and gentle movements and accompanied by reasonable explanations.

Vulva

The character and distribution of hair, the degree of development or atrophy of the labia, and the character of the hymen (imperforate or cribriform) and introitus (virginal, nulliparous, or multiparous) should be noted. Any clitorimegaly should be noted, as should the presence of cysts, tumors, or inflammation of the **Bartholin gland.** The urethra and **Skene glands** should be inspected for any purulent exudates. The labia should be inspected for any inflammatory, dystrophic, or neoplastic lesions. Perineal relaxation and scarring should be noted because they may cause dyspareunia and defects in anal sphincter tone. The urethra should be "milked" for any inflammatory exudates, which if found should be cultured for pathologic organisms.

Speculum Examination

It is important to use an appropriately sized speculum (Figure 2-2), which should be warmed and lubricated with warm water only, so as not to interfere with the examination of cervical cytology or any vaginal exudate. After gently spreading the labia to expose the introitus, the speculum should be inserted with the blades entering the introitus transversely, then directed posteriorly in the axis of the vagina with pressure exerted against the relatively insensitive perineum to avoid contacting the sensitive urethra. As the anterior blade reaches the cervix, the speculum is opened to bring the cervix into view (Figure 2-3). As the vaginal epithelium is inspected, it is important to rotate the speculum through 90 degrees, so that lesions on the anterior or posterior walls of the vagina ordinarily covered by the blades of the speculum are not overlooked. Vaginal wall relaxation should be evaluated using either a Sims speculum or the posterior blade of a bivalve speculum. The patient is asked to bear down **(Valsalva maneuver)** or to cough to demonstrate any stress incontinence. If the patient's complaint involves urinary stress or urgency, this portion of the examination should be carried out before the bladder is emptied.

The cervix should be inspected to determine its size, shape, and color. The nulliparous patient generally has a conical, unscarred cervix with a circular, centrally placed os; the multiparous cervix is generally bulbous

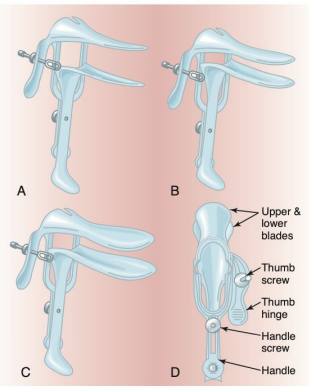


FIGURE 2-2 **A,** Pediatric speculum. **B,** Pederson speculum. **C,** Graves speculum. The Pederson speculum has narrower blades and is more appropriate for examining a nulliparous patient. **D,** Parts of a speculum.

Med 441 Team:

Leader:

Sarah Alhamlan

Members:

Ftoon Alenazi

Good Luck!

Med 438 Team:

Leaders:

Ateen Almutairi - Lama ALzamil

Members:

Med 439 Team:

Leader:

Bushra Alotaibi

Members:

Arwa Alqahtani - Sara Alharbi
Ghadah Alsuwailem