Gynecologic History and Examination of the Patient

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Abstract

Gynecologists are primary care providers for women. It is very important that a complete, comprehensive history and physical examination are performed and that every aspect of the patient's health is addressed during the gynecologic visit. The patient interview should include gynecologic and obstetrical histories, as well as past medical, surgical, family, and social history. Once an overview of the patient's health history is completed, focus can then be turned into specific complaints. In gynecology, these often are vaginal complaints, abnormal uterine bleeding, contraception counseling, fertility issues, urinary incontinence and prolapse, menopausal symptoms, or problems during intercourse. Attention should be also placed on complaints that can be associated with increased risk for gynecologic malignancies. Physical exam will then complete the encounter. The exam is focused on the patient's chief complaint but should also include a general overview. At this time, appropriate screening testing can be performed and specific issues addressed. The goal of the gynecologic visit is to address all of the woman's concerns, to obtain significant information that will guide diagnostic testing and treatment recommendations, and to develop a relationship between the practitioner and patient that will benefit the patient's health status and future well-being.

Keywords

Interview • Medical history • Gynecological history • Abnormal bleeding • Vaginal discharge • Physical examination • Pelvic examination • Speculum examination • Pap smear • Sexually transmitted diseases • Well woman exam • Gynecologic exam

Contents

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1 Introduction

Every woman at some point in her life will have a gynecologic complaint. With the passing of time, gynecologists have become primary health providers, available for firsthand general healthcare. As women usually go to the gynecologist every year, it is important that a good relationship is established between the patient and the healthcare provider with a level of trust that will allow for a complete and effective history and physical examination. Traditionally, women visit the gynecologist when it is time for their Pap smear testing. In recent years, early establishment of gynecologic care before a Pap smear is needed and has been encouraged, as women become sexually active earlier, and there are many bleeding problems that can arise after menarche and during puberty. Today, women are encouraged to have their first gynecologic appointment at around age 13–15. This visit will be the most important and will create an impression that the patient will carry for the future.

Accurate and complete history and physical examination are the most important tools in screening, diagnosis, and counseling that are performed by a healthcare provider. A detailed review of a patient's health status, previous medical conditions, and gynecologic history provides pertinent and important information that guides the physical and pelvic examination, furnishes the indications for screening, and directs the selection of diagnostic testing and imaging studies needed to arrive at a correct diagnosis and treatment plan. Care of each patient should be individualized and tailored to each woman's specific needs. Every aspect of the history and physical examination that should be addressed in the initial visit as well as the most common complaints seen in a gynecologic visit is outlined in this chapter. The goal of the physician-patient encounter is to provide a safe environment in which the patient can be honest and open and to ensure that all her concerns are addressed appropriately. After requisite knowledge of the patient is obtained, diagnostic and treatment recommendations can be made with confidence.

2 History

Learning about a person's medical history can aid the physician in coming up not only with a differential diagnosis for the presenting complaint but it may also discover other abnormalities that need further investigation. It is very important, as a clinician, to take relevant but at the same time complete histories that are complementary to the patient's chief complaint. In gynecology, there are several topics that particularly need to be addressed.

2.1 Gynecologic History

Components of a complete gynecologic history generally first include bleeding history:

- For premenopausal women, age of menarche, frequency, regularity, and length of the menstrual period are documented. It is important to address amount of flow as well, the number of pads used per day, and the occurrence of intermenstrual bleeding. Amenorrhea, irregular periods, dysmenorrhea (painful periods), and menorrhagia (heavy periods) may signal ovulatory dysfunction, structural abnormalities, or endocrine problems. All this information allows the practitioner to interpret these patterns based on the female's age and comorbidities and to determine which problems can be easily managed (NSAIDs or OCPs) or those that may be more serious and require immediate attention (bleeding disorders, Müllerian disorders).
- Once the female is over 35 or perimenopausal, the pattern and frequency of bleeding may

direct the provider toward performing endometrial sampling to rule out hyperplasia or cancer diagnosis. For postmenopausal women, the occurrence of unexplained bleeding generally requires endometrial sampling.

The next part of the gynecologic history involves questions related to sexual intercourse. At this time in the interview, it is vital that the patient is comfortable with the interviewer so responses are accurate and detailed:

- For younger, reproductive-aged patient, information on coitarche, as well as number of sexual partners currently and in the last year, is documented. Contraceptive history, present use, side effects, reasons for discontinuation, as well as condoms for STD protection are also important information.
- For perimenopausal and postmenopausal women, emphasis is placed more on problems of dyspareunia or changes in sexual desire. In both younger and older patients with sexual problems, questions related to vulvovaginal lesions, discharge, pain, or itching are pertinent.

Finally, the interview includes history of Pap smears including dates and results. Documentation in the chart includes results of the patient's last Pap smear, when and where it was performed, HPV status, and whether there have been any abnormalities in her cytology in the past.

- As this is the most important screening tool that gynecologists have for cervical cancer, it is necessary to collect enough information so the guidelines can be followed and patients can be screened correctly, avoiding unnecessary testing.

2.2 Obstetrical History

Obstetrical history should include number of total pregnancies and the outcomes of each pregnancy, including full term, preterm, abortions (medical or surgical), miscarriages, and number of live children. For reproductive-aged patients, details pertaining the types of delivery, complications such as preeclampsia, and desire for future fertility are documented. This information provides the clinician with the tools necessary to counsel the patient about the risks of future pregnancies or the need for cesarean section. For example, women with previous ectopic pregnancy have a higher probability of having another ectopic pregnancy in the future.

2.3 Medical and Surgical History

Existent medical conditions are basic components of a complete patient interview. In gynecology, it is primordial to know about history of coagulopathies; history of easy bruising; epistaxis, which can explain irregularities in the menstrual period; endocrine or developmental disorders, which can explain problems like infertility; hirsutism; as well as history of malignancies, which can show genetic predisposition to gynecologic cancers. It is also important to review the medical problems of each patient, the medications they are on, and their compliance with medical care:

- Treatment for some conditions can cause gynecologic symptoms or problems in women. An example of this is tamoxifen, an estrogen receptor antagonist used to treat breast cancer, which can cause thickening of the endometrium.
- Patients should be asked about recent weight gain, weight loss, or any other symptoms of thyroid dysfunction. Inquiry should be also made for any signs/symptoms of anemia.

History of previous surgeries will clue the practitioner into the source of a woman's pain, helping to either rule out causes in which organs have been surgically removed, or attribute the pain to the fact that the patient has had previous abdominal surgeries. The location of previous surgery, type (laparoscopic vs open), and procedures performed will give the surgeon the necessary tools needed in case new surgical intervention is needed. This information will also tailor the physical examination to specific parts that are relevant to the individual being seen.

2.4 Family History

Many gynecologic conditions have genetic components that predispose patients to serious diseases, particularly as they become older. Thus, it is important to obtain a detailed family history of first-degree relatives:

- It is known that women with Lynch syndrome have an increased risk of developing endometrial cancer. This is why gynecologists need to inquire about family history of breast, colon, and endometrial cancer.
- Ovarian and breast cancer may have genetic component [BRCA mutations].
- Clotting problems, diabetes, osteoporosis, and dementia can also have a genetic or familial component.

2.5 Social History

Gynecologists are the main care providers for many women. Important questions pertaining to social behavior include amount of alcohol consumed, (how many drinks per week and specific type of drink as alcohol content and effects change), cigarettes smoking (pack per year history and desire to quit), as well as any other drug use:

- If the patient admits to alcohol use, a CAGE questionnaire can be used to determine if the patient is alcohol-dependent or addicted so that the right referrals can be made. This can also lead to the discovery that the patient has an underlying psychiatric disorder, such as depression, that she is self-treating with alcohol.

  The use of drugs such as marijuana, cocaine, crack, and methamphetamines can have serious consequences in the overall well-being of an individual. As physicians, gynecologists have the obligation to offer addiction counseling to all patients who are dependent on any substance. This can improve their overall health status as well as avoid future medical emergencies.

  Tobacco use should be addressed with every patient. If there is a desire to quit, women can be referred to a quit-line and/or given prescriptions such as nicotine patches or gum, as well as antidepressants to aid in this difficult process.
- Patients need to be counseled about the fact that smoking is proven to increase the risk of lung, throat, bladder, colon, rectum, blood, mouth, stomach, esophagus, kidney, and cervix cancer as well as preterm labor, low birthweight, or birth defects.

  Social history also includes domestic violence screening. Specific questions are important to obtain accurate information and make the appropriate referrals. The well-being of the individual in all aspects is the ultimate goal of the health-provider-patient relationship.

3 Focused History/Common GYN Complaints

3.1 Abnormal Uterine Bleeding

- For reproductive-aged women, uterine bleeding becomes abnormal when it differs from a woman's usual cycle. Heavy menstrual bleeding is defined as >80 mL blood loss per period, changing a pad or tampon after less than 2 h, passing clots the size of a quarter or larger, or periods lasting longer than 7 days. It is important to ask how many pads are used during the day with a period and the duration of the period every month (American College of Obstetricians and Gynecologists 2012). In the adolescent female, abnormal bleeding is most likely secondary to immaturity of the hypothalamic-pituitary axis. However, it can also indicate an underlying bleeding disorder (Mullins et al. 2015). In reproductive-aged women, the algorithm of PALM-COEIN (polyp, adenomyosis, leiomyoma, malignancy and hyperplasia, coagulopathy, ovulatory dysfunction, endometrial, iatrogenic, and not yet classified) is used to determine the etiology for abnormal uterine bleeding. The most common causes of

bleeding in perimenopausal women include uterine pathologies and anovulatory bleeding.

Postmenopausal bleeding should raise concern for endometrial carcinoma until proven otherwise (Moodley and Roberts 2004). Menopause is defined as 12 months of amenorrhea after the last period. Any bleeding after this should be evaluated immediately. This complaint accounts for about 5% of office gynecologic visits.

- A common cause of postmenopausal bleeding is vaginal atrophy. Other etiologies include hyperplasia, polyps, and fibroids as well as liver, thyroid, or kidney disease.

3.2 Vaginal Discharge/Itching

Vaginal discharge can be physiologic and found in every woman during the physical exam. However, vaginal discharge is one of the most common complaints that brings patients to the gynecologist's office. Physiologic discharge is clear, cloudy, white or light yellow. Generally, it is scant, watery or very thin, asymptomatic and not foul smelling. Abnormal discharge may represent vaginitis or a sexually transmitted diseases. During the interview, the patient is asked about the onset, duration, consistency, color, odor, and volume of discharge along with sexual history. A complete picture is obtained once a pelvic examination is performed.

3.3 Pelvic Pain

Pelvic pain is a vague and common complaint. Because there can be multiple causes, important questions need to be asked at the time of interview to guide the physical exam. The gynecologist needs to know about the type of pain; exact location and radiation; timing, including if pain occurs during periods or becomes worse during periods; and severity. The effect of associated factors such as sexual activity, menstruation, or physical activity may provide clues as to the etiology of pelvic pain (Reiter 1990). Associated urinary or gastrointestinal symptoms may guide the diagnosis away from a gynecologic cause and referral for further evaluation by other specialists:

- Differential diagnosis for pelvic pain includes ovarian cyst, hemorrhagic cysts, ovarian torsion, endometriosis, adhesions, complication of pregnancy, or pelvic inflammatory disease.
- A comprehensive interview guides the physician to evaluate particular aspects of the physical exam and to which diagnostic studies needed.

3.4 Contraceptive Counseling

Even though there are multiple methods of contraception, not all of them are right for the same patient. It is important at the time of the interview to assess if the patient is using or wants to use contraception for protection against unintended pregnancy or against sexually transmitted diseases or both (Steiner 1999). The patient at this time of the interview needs to talk about prior contraceptive use, as well as medical conditions or social habits that will prevent her from using certain contraceptive methods:

- Both the WHO and CDC have published eligibility criteria for the use of hormones for contraception, including relative and absolute contraindications for their use (US Selected Practice Recommendations for Contraceptive Use 2013; WHO 2012; Centers for Disease Control and Prevention 2010). Migraine headaches, smoking, and hypertension are common problems that limit the use of combination oral contraceptive pills.
- Hormonal contraception such as the birth control pills or progestin IUD or injections can also be used to treat conditions such as menorrhagia secondary to anovulatory bleeding.
- The presence of acne or PMS is often improved on selected combination oral contraceptive pills.

3.5 Infertility

Not being able to conceive is a common gynecologic complaint. Most women think that getting pregnant is easy and that after trying for 1 month they should be able to get pregnant. Thus, it is primordial that patients are explained during their gynecologic visit that infertility is defined as failure to conceive after 12 months of regular intercourse (for 6 months if over 35 years of age). For women with regular cycles, an infertility work-up is generally initiated after 12 months of trying to conceive (Practice Committee of American Society for Reproductive Medicine 2012):

- The gynecologist should inquire about the partner, if he has had any children in the past and if he has had his semen tested to rule out male infertility.
- The initial work-up includes a day 21 progesterone, TSH, metabolic panel, CBC, and blood type and a day 3 FSH for women 35 and older. A pelvic ultrasound or hysterosalpingogram is used to assess tubal and uterine problems.
- Ovulation induction with Clomid or letrozole is used for anovulatory patients.

3.6 Pelvic Organ Prolapse

Pelvic organ prolapse is diagnosed primarily during the physical exam. However, the patient may present complaining of urinary incontinence, looseness on intercourse, splinting, frequent urinary tract infections, vaginal pressure, or a vaginal "bulge."

4 Physical Examination

4.1 When to Start?

ACOG recommends that the initial reproductive health visit should begin between the ages of 13 and 15 (Committee opinion 598 2014) . This should include a complete history, as well as a physical examination including a general examination, visual examination of the breasts, and an external vaginal exam. Pelvic examination is only performed when the patient has a particular symptom or when screening with a Pap smear. An internal examination should be performed if the clinician is concerned about information elicited in the history of the patient Committee on Gynecologic Practice (2012):

- Screening with Pap smear begins at 21 years of age and from then on following ASCCP guidelines. Some practices require that throughout the physical examination, a chaperone must be in the room.

4.2 Components of the Physical Exam

4.2.1 Breast Exam

The breast examination is performed visually first, noting any gross abnormalities, masses, or defects. Palpation is then performed with the preferred technique examining the breast in vertical strips beginning in the axilla and extending in a straight line down the midaxillary line to the bra line. The fingers are then moved medially and continued in an up and down movement between the clavicle and the bra line making circular motions with the pads of the middle three fingers. Each breast area is examined with three different pressures lasting for at least 3 min in each breast (Barton et al. 1999).

4.2.2 Abdominal Exam

Abdominal exam should include inspection, auscultation, palpation, and percussion. The patient is placed in a supine position with legs straightforward or flexed at the knees to avoid contraction of the abdominal muscles. The patient is then told to relax, and the examiner auscultates in the four quadrants listening for bowel sounds. He/she will then proceed to palpate, feeling for masses or tenderness to superficial and deep palpation. Lastly, the abdomen is percussed [tapping on the surface to determine the underlying structure]. A dull sound suggests the presence of a solid

mass while a more resonant sound indicates a hollow, air-containing structure.

4.2.3 Pelvic Exam: Bimanual and Speculum Examination

Pelvic examination begins with inspection of the external genitalia. For the first exam, the examiner should have explained to the patient the nature of the examination and the steps entailed. The patient should be comfortable with the examiner. Inspection will allow the practitioner to suspect developmental anomalies (hair distribution, clitoromegaly), vulvar dysplasia or HPV changes (discoloration, redness, growths), or infection (redness, discharge). The Bartholin's glands cannot be palpated when they are healthy:

- The examiner needs to look carefully at the introitus, labia minora, labia majora, clitoris, and perineal body.

Once the external genitalia have been inspected, a speculum examination is used to evaluate the vaginal canal and the cervix. It is important to notice vaginal lesions, signs of atrophy, presence of any growths, or gross lesions. Attention is now turned to the cervix, which is then inspected for lesions, bleeding, or abnormal discharge.

- Cultures should be collected at this point if infection is suspected.
- Cytology is done at the time of the speculum examination.

Bimanual examination can be performed at any point of the exam. It consists of inserting the index and middle finger of the dominant hand of the examiner into the vagina while the other hand is placed on the abdomen. The abdominal hand is then used to push downward while the pelvic hand is used to elevate the uterus and adnexa. Between the two hands, the pelvic organs are evaluated while, at the same time, palpating for masses, cervical or fundal tenderness, and adnexal masses or tenderness. At this point, orientation of the uterus should also be noted.

5 Tests Performed on Exam

5.1 Pap Smear

As previously mentioned, cervical cancer screening starts at 21 years old and after that following ASCCP guidelines depending on results. There are also ACOG and US Preventive Task Force guidelines that are similar. Cervical cancer screening guidelines for average-risk women is shown below:

- HPV testing is generally not recommended in women aged < 30 years but Pap testing is done every 3 years.
- For women over 30, co-testing with cytology and HPV is recommended every 5 years.
- Aged >65 with no or low risk for cervical cancer and adequate screening history may stop screening.

5.2 STD Testing

STD testing should be performed when there is high suspicion for a sexually transmitted infection based on history (multiple sexual partners, unprotected intercourse) and examination (abnormal discharge, pelvic pain) or when the patient requests it. STDs such as HIV, syphilis, and hepatitis B and C can be tested in the blood. Chlamydia and gonorrhea are most easily tested in the urine and in a vaginal culture:

- CDC recommended all adults and adolescents from ages 13 to 64 be tested at least once for HIV.
- CDC also recommends that sexually active women <25 years of age or older women with risk factors such as new or multiple sex partner or sex partner with STI to have annual gonorrhea and chlamydia screening.
- CDC recommends syphilis, HIV, hepatitis B, and chlamydia screening for all pregnant women and gonorrhea screening for at-risk pregnant women with repeat testing as needed.

6 Conclusion

The gynecologic history and examination should be a comprehensive review of the patient's health status, which will allow the physician to become familiar with the patient, her comorbidities, and medical needs. Gynecologists are primary healthcare providers, and as such they are responsible for the general well-being of the patient. A comprehensive physical examination will guide the physical examination, diagnostic tests that are needed, as well as treatment. **It is important to establish a good relationship with the patient, as she needs to be open with the healthcare provider and provide all the necessary information.**

Gynecologists are also surgeons, and surgical decisions are made daily based on patient complaints and physical examination. After a complete evaluation of patient symptoms, it is important to perform a complete examination, with appropriate documentation of findings, concerns, and decisions made during the pelvic exam. The complaints and examination findings guide the type of surgery performed and mode of entry. These decisions make a difference in prognosis, recovery time, and overall return to a regular, healthy lifestyle. Limitations should be recognized, and appropriate referrals should be made to different specialists when other findings are encountered in the physical examination. Every year, women after age 30 should be evaluated for screening mammography, women over 50 should have a colonoscopy, and women over 65 [or earlier based on risk factors] should have a DEXA scan.

> As primary care providers, gynecologists are responsible to make the appropriate health and lifestyle arrangements for their patients.

An appropriate, complete, and accurate history and physical examination help to assure that all the patient's issues, concerns, and risk factors are addressed. A solid, high priority, and trusting relationship with their gynecologist can lead our patients to a healthier and happier life.

7 Cross-References

- ▶ Basic Management of Infertility
- ▶ Breast Cancer Screening
- ▶ Contraception and Family Planning
- ▶ Management of Abnormal Uterine Bleeding: Later Reproductive Years
- ▶ Management of Cervical Dysplasia
- ▶ Management of Intraepithelial Lesions of the Cervix
- ▶ Management of Menopausal Symptoms
- ▶ Management of Risks Factors for Older Women: Osteoporosis and Cardiovascular Disease
- ▶ Management of Uterine Fibroids
- ▶ Management of Vulvodynia
- ▶ Workup and Management of Polycystic Ovary Syndrome

References

American College of Obstetricians and Gynecologists. Diagnosis of abnormal uterine bleeding in reproductive-aged women. Practice bulletin no. 128. Obstet Gynecol. 2012;120:197–206.

Barton MB, Elmore JG, Fletcher SW. Breast symptoms among women enrolled in a health maintenance organization, frequency, evaluation, and outcome. Barton MB, Elmore JB, Fletcher SW. Ann Intern Med. 1999; 130(8):651–7.

Centers for Disease Control and Prevention. Morbidity and mortality weekly report (MMWR). U.S. medical eligibility criteria for contraceptive use. 2010. Adapted from the World Health Organization Medical Eligibility Criteria for Contraceptive Use. 4th ed. Early release – 28 May 2010. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr59e0528a1.htm

Committee on Gynecologic Practice. Committee opinion no. 534: well-woman visit. Obstet Gynecol. 2012;120:421.

Committee on Adolescent Health Care. ACOG committee opinion: The initial reproductive health visit. Number 598, May 2014. www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Adolexcent-Health-Care/The-initial-reproductive-Health-Visit. Last assessed on February 11, 2017.

Moodley M, Roberts C. Clinical pathway for the evaluation of postmenopausal bleeding with an emphasis on

endometrial cancer detection. J Obstet Gynaecol. 2004;24:736.

Mullins TL, Miller RJ, Mullins ES. Evaluation and Management of Adolescents with Abnormal Uterine Bleeding. Pediatr Ann. 2015; 24(9): e218–22. doi: 10.3928/00904481-20150910-09

Practice Committee of American Society for Reproductive Medicine. Diagnostic evaluation of the infertile female: a committee opinion. Fertil Steril. 2012;98:302.

Reiter RC. A profile of women with chronic pelvic pain. Clin Obstet Gynecol. 1990;33:130.

Steiner MJ. Contraceptive effectiveness: what should the counseling message be? JAMA. 1999;282:1405.

US Selected Practice Recommendations for Contraceptive Use. 2013. http://www.cdc.gov/mmwr/pdf/rr/rr62e0614.pdf

WHO. Medical eligibility criteria for contraceptive use. 4th ed. 2009. http://whqlibdoc.who.int/publications/2010/9789241563888_eng.pdf