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Vaginal Bleeding

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Abstract

In reproductive age women may undergo a causal gynecological alteration or other findings suggesting the cause. If there is no apparent change in the hormone therapy in the younger patients and bleeding is pointic, it is probably associated with hormonal therapy. If the problem consists only of abundant menstrual bleeding, consideration is given to changes in the uterus or bleeding disorder. Inheritance bleeding disorders can initially be manifested by abundant menstrual bleeding that begins in menaches or in adolescence. Postmenopausal women should consider gynecological cancer.

All women in the reproductive age should do urine screening for pregnancy. During early pregnancy (before 5 weeks) urine examination may be insufficiently sensitive. Pollution urine with blood can give false results.

Abnormal vaginal bleeding is any vaginal bleeding that appears independently of regular and orderly menstruation. This is one of the most common problems in gynecology. There is a huge difference in meaning, diagnosis, therapy and prognosis of vaginal bleeding in pregnancy and out of pregnancy, and then in women of different ages.

Vaginal bleeding can result with abnormal shock. Symptoms of shock are: damp, cold and sticky skin, rapid and weak pulse, thirst, possible collapse or loss of consciousness.

Keywords: *Bleeding, Pregnancy, Emergency, Health*

Introduction

Heavy menstrual bleeding is the most common sign of an acquired or inherited bleeding disorder in females [1]. For many young women, the manifestations of an inherited bleeding disorder do not surface until menarche, which can lead to a delay in diagnosis. Besides heavy menstrual bleeding, patients can have menstrual pain from bleeding into the corpus luteum, bleeding from trauma or procedures, easy bruising, and gastrointestinal bleeding. An un diagnosed bleeding disorder can lead to severe blood loss, chronic iron deficiency, and unnecessary surgical procedures, such as a hysterectomy. Therefore, identifying a possible bleeding disorder in these young women is crucial to allow an initiation of targeted therapy. Management of bleeding will depend on the diagnosis, as well as the severity and bleeding location. Many adolescent females with menorrhagia can be successfully manage with a combination of hormonal control and/or antifibrinolytics. Depending on the diagnosis, treatment can also include coagulation factor replacement, blood product transfusion, as well as specific therapies for acquired bleeding disorders, such as intravenous immune globulin, plasmapheresis, or corticosteroids.

Information about uterine bleeding is an essential vital sign for reproductive age women [2]. At every clinical encounter, a woman should be asked about the normalcy and timing of her last menses. At initial and periodic well-woman visits, a full description of a patient's menstrual bleeding should be documented, including the frequency of her bleeding, duration of flow, volume of flow, and cycle-to-cycle variability.

Abnormal uterine bleeding patterns range from complete absence of any uterine spotting to excessive and/or prolonged bleeding. Many different reproductive and general health conditions can result in abnormal bleeding, so evaluation should always

be comprehensive. When a woman first complains of "abnormal bleeding," careful questioning can provide the information needed to describe her bleeding patterns. A through physical exam is needed because it may reveal the etiology of the abnormal uterine bleeding. At the end of a patient's first visit, the assessment includes the description of her menses using the FIGO terms, the differential diagnoses, and planned diagnostic studies as well medications for the woman to use as bridge therapy until her diagnosis is confirmed.

The physician should try to establish whether the patient's pattern is cyclic or anovulatory [3]. If the patient menstruates every 21–35 days, her cycle is consistent with an ovulatory pattern of bleeding. To confirm ovulation, patients can check their basal body temperature, cervical mucus, and luteinizing hormone (LH) levels. Basal body temperature can be checked using a basal body temperature thermometer, which allows for a precise measurement of the patient's temperature within a narrower range than a standard thermometer. After ovulation the ovary secretes an increased amount of progesterone, causing an increase in temperature of approximately 0.5°F over the baseline temperature in the follicular phase. The luteal phase is often accompanied by an elevation of temperature that lasts 10 days. Patients can also be taught to check the consistency of their cervical mucus, watching for a change from the sticky, whitish cervical mucus of the follicular phase to the clear, stretching mucus of ovulation. Finally, the patient can use an enzyme-linked immunosorbent assay (ELISA) testing kit to check for the elevation of LH over baseline that occurs with ovulation. The patient should be asked to describe the current vaginal bleeding in terms of onset, frequency, duration, and severity. Age, parity, sexual history, previous gynecological disease, and obstetrical history will further assist the physician in focusing the evaluation of the women with vaginal bleeding. The physician should ask about medications, including contraceptives, prescription medications, and over-the-counter (OTC) medications and supplements. The patient should be asked about any OTC preparations she might be taking.

Normal menstruation produces vaginal bleeding that lasts 4 days on average (range 1–8) and a total volume of about 50 mL of blood (range 20–80 mL) [4]. Vaginal bleeding indicating an emergency can occur in pregnant and nonpregnant women; therefore, if possible, it is helpful to ascertain if the woman knows if she is pregnant.

Causes of early bleeding included ectopic pregnancy and miscarriage. Ectopic pregnancy often presents with low abdominal pain in an emergent situation and is discussed in the acute abdomen section below. The complete evaluation of a woman with bleeding early in pregnancy requires advanced diagnostics. This scenario may require diversion so that the woman can be taken to a hospital for definitive diagnostics and treatment. Nonpregnancy-related causes of emergent vaginal bleeding include severe menorrhagia and genital tract trauma.

Anatomical disorders which can lead to heavy irregular bleeding include benign or malignant tumors of the reproductive organs, and pregnancy-related problems such as retention of products of conception, ectopic pregnancy, and placental tumors (trophoblastic tumors) [5]. Infections of the internal genitalia can cause irregular but usually light vaginal bleeding.

If no anatomical cause can be detected, the bleeding problem is called dysfunctional. It is rarely life threatening, but can be very disabling to the patient. This problem is poorly understood and usually difficult to treat. Therapy must be designed in collaboration with the patient's wishes regarding regular vaginal bleeding and her desires for child-bearing. For example, a patient who feels her femininity is related to her possession of a uterus may be distraught at its removal even though she is socially embarrassed and sexually immobilized by her metrorrhagia. Another patient who has a firm desire to forego all future possibilities of pregnancy may be inappropriately selected for a trial of hormonal therapy.

Ectopic Pregnancy

Ectopic pregnancy is the abnormal location of a pregnancy, outside of the uterus [6]. The most common location of an ectopic pregnancy is the fallopian tube although ectopic pregnancies may also be found in the cervix, interstitial segment of the fallopian tube, ovary, uterine scar from previous cesarean section, orabdominal cavity. The greatest risk to maternal morbidity and mortality associated with ectopic pregnancy is tubal rupture, leading to hemodynamic instability and rapid maternal decompensation. Therefore, early detection and treatment can lead to improved maternal outcomes.

Diagnosis of ectopic pregnancy can generally be made using a combination of serial beta HCG monitoring and transvaginal ultrasound. First-line treatment in a stable patient is usually methotrexate. Methotrexate may be administered via a fixed multidose, single-dose, or two-dose regimen in combination with close beta HCG monitoring. For women who fail medical management, in whom medical management is contrain dicated, or for whom tubal rupture is suspected, laparoscopic surgery is the treatment of choice. Surgical management may be a ccomplished by either salpingostomy or salpingectomy, depending on patient characteristics.

Bleeding during the first trimester of pregnancy must always signal to the clinician the possibility of pregnancy loss [7]. Prompt identification of symptoms accompanying vaginal bleeding will assist the clinician to differentiate between simple spotting during pregnancy, SAB, ectopic pregnancy, and hydatidiform mole.

Pelvic and abdominal pain and unexplained vaginal bleeding are the primary symptoms experienced by most women with ectopic pregnancy. The pain may be described as vague, sharp, diffuse, or unilateral. The woman may have had a time of amenorrhea, and pregnancy may or may not already be diagnosed. A ruptured ectopic pregnancy is characterized by a sudden onset of vaginal bleeding and sharp, severe, unilateral abdominal pain. Following rupture, symptoms of significant blood loss and resulting shock may include hypotension, shoulder pain, and breast tenderness.

In the evaluation of a pregnant patient with vaginal bleeding, ultrasound can be used to rapidly identify fluid in the pelvis or abdomen (presumed to be blood in the setting of shock), which is highly suggestive of ruptured ectopic pregnancy [8]. In the setting of symptomatic vaginal hemorrhage in the first trimester of pregnancy, ultrasound may show retained intrauterine products of conception, indicative of an incomplete spontaneous abortion. For the nonpregnant patient, an ultrasound showing significant pelvic or intraabdominal fluid may be representative of a hemorrhagic ruptured ovarian cyst, which occasionally requires surgical intervention.

Ectopic pregnancy is the leading cause of pregnancy-related death in the first trimester. Patients with ectopic pregnancy are often encountered in the emergency department, and the disorder may be difficult to identify given the varied presentations that occur. Because ectopic pregnancy can be life threatening, it should be suspected in any patient presenting with amenorrhea, vaginal bleeding, and lower abdominal pain. For some women, the initial presenting symptom of an ectopic pregnancy is syncope. The most common presentingcomplaint is vaginal bleeding, often scant at first, with cramping lower abdominal pain.

The incidence of ectopic pregnancy is increased in women using an IUD and in those with a history of pelvic infection (eg, salpingitis), tubal surgery, infertility treatments, or previous tubal pregnancies. About 98% of ectopic pregnancies are tubal.

Treatment of possible ectopic pregnancy is determined by the patient's risk factors for ectopic pregnancy (ie, infertility treatments, history of tubal ligation, or pelvic inflammatory disease), hemodynamic stability, and physical examination findings. Sonography is important in the evaluation of pregnant patients with either abdominal pain or vaginal bleeding. Quantitative hCG results may help in the interpretation of ultrasound findings. In addition, Rh-negative mothers should receive Rho (D) immune globulin.

Vaginal Bleeding in Pregnancy

Triage ahead patients with severe bleeding or evidence of hypovolaemic shock. Resuscitate first (O_2, cross-match and obtain Rhesus status, start IV fluids) and ask questions later [9]. Most patients with vaginal bleeding, however, do not require resuscitation. Take a careful menstrual history and ask about associated symptoms. Attempt to assess the amount of bleeding. Interpretation of a patient's description is notoriously difficult, but useful pointers are the presence of clots and the rate of tampon use. Always consider the possibility of pregnancy: remember that ruptured ectopic pregnancy can present before a period is missed. Examine for evidence of hypovolaemia and abdominal masses/tenderness. Depending upon the circumstances, speculum and bimanual vaginal examinations may be required: local policy will determine who should perform this.

Vaginal bleeding in pregnancy produces under standable maternal distress. It may indicate serious illness that is a threat to the life of both the foetus and mother.

An indication of possible causes of vaginal bleeding related to pregnancy is apparent from gestation. Bleeding may, of course, be unrelated to pregnancy.

Health Care

Critical and intensive care medicine is an integrated discipline that requires the clinician to examine a number of important basic interactions [10]. These include the interactions among organ systems, between the patient and his or her environment, and between the patient and life-support equipment. Gas exchange within the lung, for example, is dependent on the matching of ventilation and perfusion—in quantity, space, and time. Thus, neither the lungs nor the heart are solely responsible; rather, it is the cardiopulmonary interaction that determines the adequacy of gas exchange.

Critical care often entails providing advanced life support through the application of technology. Mechanical ventilation is a common example. Why is it that positive pressure ventilation and positive end-expiratory pressure (PEEP) can result in oliguria or reduction of cardiac output? Many times clinical assessments and your therapeutic plans will be directed at the interaction between the patient and technology; this represents a unique "physiology" in itself.

Emergency

An emergency is commonly defined as any condition perceived by the prudent layperson—or someone on his or her behalf—as requiring immediate medical or surgical evaluation and treatment [11].

So what does an emergency physician (EP) do? He or she routinely provides care and makes medical treatment decisions based on real-time evaluation of a patient's history; physical findings; and many diagnostic studies, including multiple imaging modalities, laboratory tests, and electrocardiograms. The EP needs an amalgam of skills to treat a wide variety of injuries and illnesses, ranging from the diagnosis of an upper respiratory infection or dermatologic condition to resuscitation and stabilization of the multiple trauma patient. Furthermore, these physicians must be able to practice emergency medicine on patients of all ages. It has been said that EPs are masters and mistresses of negotiation, creativity, and disposition. Clinical emergency medicine may be practiced in emergency departments (EDs), both rural and urban; urgent care clinics; and other settings such as at mass gathering incidents, through emergency medical services (EMS), and in hazardous material and bioterrorism situations.

Physician in Emergency Department

Medical malpractice lawsuits and medicolegal issues are a major concern for physicians and health care institutions [12].

The true extent of the ED malpractice problem is unknown, partly because EDs and emergency physicians are insured by many different insurance companies that have not pooled their claim information and partly because many claims involve events that occurred not only in the ED but also in other parts of the hospital. It is clear, however, that disputes have increased attention to risk management; the number of ED malpractice claims and the size of malpractice judgments are increasing.

When caring for a patient, a physician is obligated to provide treatment with the knowledge, skill, and care ordinarily used by reasonably well-qualified physicians practicing in similar circumstances. In some jurisdictions, these similar circumstances include the peculiarities of the locality in which the physician practices. This locality rule was developed to protect the rural practitioner who was sometimes deemed to have less access to the amenities of urban practices or education centers. However, the locality rule is being replaced by a national standard of care in recognition of improved information exchange, ease of transportation, and the more widespread use of sophisticated equipment and technology.

Possibility of Lawsuit

An overview of the main categories of clinical negligence claims which are typically brought against medical professionals will be provided, namely: consent, errors of treatment (including surgical errors) and errors of diagnosis [13]. This is not intended to be an exhaustive categorisation of cases, but it covers the majority of clinical negligence cases which doctors are likely to encounter in practice. Other types of cases include secondary victim claims and systemic/procedural failings. In each category, key legal principles are set out, a case example is given and advice is provided on how doctors can avoid litigation.

The advantages of avoiding litigation are self- evident. For doctors, the litigation process is timeconsuming,

difficult and distressing. For patients, the consequences of clinical negligence are often devastating. For the NHS, the costs of litigation are burdensome: NHS Resolution's stated strategic objective is "a move to an organisation which is more focused than before on prevention, learning and early intervention to address the rising costs of harm in the NHS". For all concerned, it is clear that prevention is better than cure.

The medical record is a legal document [14]. It protects clinicians and the facility and therefore should be clear and precise, without ambiguity. The medial record holds the memory of all disciplines associated with the patient. It provides proof of the care that the resident/patient has received during the time he or she was admitted to the facility.

In the event of a lawsuit, your documentation can defend you if it is properly done. A lawsuit can be filed several years after you have documented on a patient, so the medical record serves as your memory. Judges rely heavily on documentation concerning behaviors and resident reactions to situations. Accurate documentation assists lawyers and judges in making appropriate decisions.

Conclusion

Anamnesis should determine the amount and duration of bleeding, as well as the correlation between menstrual bleeding and sexual intercourse. A gynecological anamnesis should be taken; it includes the date of the last normal menstruation, the age of menarche and menopause (when necessary), the duration and regularity of the cycle, and the amount and duration of typical menstrual bleeding.

With references to other organ systems, it is necessary to look for symptoms of possible causes, including absence of menstruation, breast tension and nausea (pregnancy-related bleeding), abdominal pain, dizziness and syncope (ectopic pregnancy or ruptured ovarian cyst), chronic pain and weight loss (cancer) bruising, excessive bleeding during tooth brushing, minor laceration or extraction of blood (bleeding disorder).

Any vaginal bleeding which is not associated with vaginal bleeding during the menstrual period is a condition and reason to visit a doctor. The doctor is obliged to propose tests that should identify the reason for vaginal bleeding. When the cause is found, the patient is proposed a further treatment.

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