Contraception

NOVEMBER 19, 2024

How To Be Reasonably Certain that a Patient Is Not Pregnant

SUMMARY FOR U.S. SPR, 2024 | PAGE 7 OF 26 | ALL PAGES ↓

AT A GLANCE

This page includes recommendations for health care providers that address how to be reasonably certain that a patient is not pregnant. This information comes from the *2024 U.S. Selected Practice Recommendations for Contraceptive Use* (U.S. SPR).

How to be reasonably certain that a patient is not pregnant

In most cases, a detailed history provides the most accurate assessment of pregnancy risk in a patient who is about to start using a contraceptive method. Multiple criteria for assessing pregnancy risk are listed in the recommendation that follows (Box 3). These criteria are highly accurate (i.e., a negative predictive value of 99%–100%) in ruling out pregnancy among patients who are not pregnant.[33–36] Therefore, CDC recommends that health care providers use these criteria to assess pregnancy status in a patient who is about to start using contraceptives. If a patient meets one of these criteria (and therefore the health care provider can be reasonably certain that the patient is not pregnant), a urine pregnancy test might be considered in addition to these criteria (based on clinical judgment), bearing in mind the limitations of the accuracy of pregnancy testing. If a patient does not meet any of these criteria, then the health care provider cannot be reasonably certain that the patient is not pregnant, even with a negative pregnancy test. Routine pregnancy testing for every patient is not necessary.

On the basis of clinical judgment, health care providers might consider the addition of a urine pregnancy test; however, providers should be aware of the limitations, including accuracy of the test relative to the time of last sexual intercourse, recent delivery, or spontaneous or induced abortion. If a patient has had recent (i.e., within the past 5 days) unprotected sexual intercourse, consider offering emergency contraception (either a copper intrauterine device [Cu-IUD] or emergency contraceptive pills [ECPs]) if pregnancy is not desired.[1]

Comments and Evidence Summary

The criteria for determining whether a patient is pregnant depend on the assurance that the patient has not ovulated within a certain amount of time after their last menses, spontaneous or induced abortion, or delivery. Among menstruating patients, the timing of ovulation can vary widely. During an average 28-day cycle, ovulation generally occurs during days 9–20.[37] In addition, the likelihood of ovulation is low from days 1–7 of the menstrual cycle.[38] After a spontaneous or an induced abortion, ovulation can occur within 2–3 weeks and has been found to occur as early as 8–13 days after the end of the pregnancy. Therefore, the likelihood of ovulation is low ≤7 days after an abortion.[39–41] A systematic review reported that the mean day of first ovulation among postpartum nonlactating women occurred 45–94 days after delivery.[42] In one study, the earliest ovulation was reported at 25 days after delivery. Among women who are within 6 months postpartum, are fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeds), and are amenorrheic, the risk for pregnancy is <2%.[43],[44]

Although pregnancy tests often are performed before initiating contraception, the accuracy of qualitative urine pregnancy tests varies depending on the timing of the test relative to missed menses, recent sexual intercourse, or recent pregnancy. The sensitivity of a pregnancy test is defined as the concentration of human chorionic gonadotropin (hCG) at which 95% of tests are positive. Most qualitative pregnancy tests approved by the Food and Drug Administration (FDA) report a sensitivity of 20–25 mIU/mL in urine.[45–48] However, pregnancy detection rates can vary widely because of differences in test sensitivity and the timing of testing relative to missed menses.[47],[49] Certain studies have demonstrated that an additional 11 days past the day of expected menses are needed to detect 100% of pregnancies using qualitative tests.[46] In addition, pregnancy tests cannot detect a pregnancy resulting from recent sexual intercourse. Qualitative tests also might have positive results for several weeks after termination of pregnancy because hCG can be present for several weeks after delivery or abortion (spontaneous or induced).[50–52]

For contraceptive methods other than intrauterine devices (IUDs), the benefits of starting to use a contraceptive method likely exceed any risk, even in situations in which the health care provider is uncertain whether the patient is pregnant. Therefore, the health care provider can consider having patients start using contraceptive methods other than IUDs at any time, with a follow-up pregnancy test in 2–4 weeks. The risks for not starting to use contraception should be weighed against the risks for initiating contraception use in a patient who might be already pregnant. Most studies have demonstrated no increased risk for adverse outcomes, including congenital anomalies or neonatal or infant death, among infants exposed in utero to combined oral contraceptives (COCs).[53–55] Studies also have demonstrated no increased risk for neonatal or infant death or developmental abnormalities among infants exposed in utero to depot medroxyprogesterone acetate (DMPA).[54],[56],[57]

In contrast, for patients who want to begin using an IUD (Cu-IUD or LNG-IUD), in situations in which the health care provider is uncertain whether the patient is pregnant, the patient should be provided with another contraceptive method to use until the health care provider is

reasonably certain that they are not pregnant and can place the IUD. Pregnancies among women with IUDs are at higher risk for complications such as spontaneous abortion, septic abortion, preterm delivery, and chorioamnionitis.[58]

A systematic review identified four analyses of data from three diagnostic accuracy studies that evaluated the performance of the listed criteria (Box 3) through use of a pregnancy checklist compared with a urine pregnancy test conducted concurrently.[59] The performance of the checklist to diagnose or exclude pregnancy varied, with sensitivity of 55%–100% and specificity of 39%–89%. The negative predictive value was consistent across studies at 99%–100%, indicating the pregnancy checklist correctly ruled out women who were not pregnant. One of the studies assessed the added usefulness of signs and symptoms of pregnancy and found that these criteria did not substantially improve the performance of the pregnancy checklist, although the number of women with signs and symptoms was small[33] (Level of evidence: diagnostic accuracy studies, fair, direct).

Box 3. How to be reasonably certain that a patient is not pregnant

A health care provider can be reasonably certain that a patient is not pregnant if the patient has no symptoms or signs of pregnancy and meets any one of the following criteria:

- Is ≤7 days after the start of normal menses.
- Has not had sexual intercourse since the start of last normal menses.
- Has been correctly and consistently using a reliable method of contraception.
- Is ≤7 days after spontaneous or induced abortion.
- Is within 4 weeks postpartum.
- Is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeds), amenorrheic, and <6 months postpartum.

SOURCES

CONTENT SOURCE:
National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP); Division of Reproductive Health