Early Pregnancy Loss

Early pregnancy loss is the spontaneous loss of a pregnancy during the first trimester.

Causes of and Risk Factors for Early Pregnancy Loss

Early pregnancy loss is caused most commonly by fetal chromosomal abnormalities, which account for more than two-thirds of all early pregnancy loss between 6 and 10 weeks of gestation.

Risk factors for early pregnancy loss include older age at onset of pregnancy, prior pregnancy loss, some medical conditions (such as diabetes, hyperthyroidism, and lupus), and exposures during pregnancy that may harm a developing fetus (such as alcohol; some viral or bacterial infections; environmental exposure to lead, mercury, or radiation; and certain medications).

How Is Early Pregnancy Loss Diagnosed?

The diagnosis of early pregnancy loss can be made by clinical symptoms, such as vaginal bleeding, or by decreasing levels of β-human chorionic gonadotropin (β-hCG), a hormone produced in pregnancy, in a patient whose vaginal examination reveals an open cervix. A vaginal ultrasound that shows either an empty uterus or a uterine gestational sac without an embryo can also diagnose early pregnancy loss.

Management of Early Pregnancy Loss

There are 3 management options for patients with early pregnancy loss who do not have vaginal bleeding or signs of infection.

Expectant management: Without any intervention, 25% to 50% of patients with early pregnancy loss pass pregnancy tissue within 1 week, and more than 80% of patients with bleeding completely expel products of conception within 2 weeks. Patients who opt for expectant management should have access to a nearby emergency department, in case they experience excessive bleeding.

Medication management: Mifepristone given 24 hours prior to misoprostol or misoprostol given alone can be used to expedite expulsion of pregnancy tissue. Medication management can be done at home but should be used with caution in patients who are taking blood thinner medications or have a low red blood cell count, or those without access to a nearby emergency department.

Procedural or surgical management: Uterine aspiration, which can be performed in the outpatient setting or in an operating room, successfully removes products of conception in 99% of patients. Office-based aspiration is convenient and offers a range of pain control options, including injection of local anesthetic into the cervix and intravenous medications for pain or anxiety. Uterine aspiration in the operating room is recommended for patients at high risk of bleeding or for those with uterine anomalies or large fibroids, and offers deep sedation or general anesthesia for pain control.

Potential Complications of Early Pregnancy Loss Treatments

Rare complications following treatment of early pregnancy loss include infection, bleeding, retained products of conception, and surgical injury. For medication management, the rate of incomplete expulsion of pregnancy tissue, which results in the need for uterine aspiration, is lower when both mifepristone and misoprostol are given compared with misoprostol alone.

Follow-up After Early Pregnancy Loss Treatment

Individuals who chose expectant management or medications should be offered follow-up to ensure complete passage of the products of conception. This evaluation typically includes clinical findings (decreased or absent vaginal bleeding), and either β-hCG measurement or pelvic ultrasonography to confirm absence of a gestational sac. Patients who undergo procedural or surgical management for early pregnancy loss should receive routine gynecologic care if they have no symptoms or complications from their procedure.

FOR MORE INFORMATION

Eunice Kennedy Shriver National Institute of Child Health and Human Development
www.nichd.nih.gov/health/topics/factsheets/pregnancyloss

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