First Trimester Vaginal Bleeding

First trimester vaginal bleeding (https://www.radiologyinfo.org/en/info/vaginalbleeding) occurs in 7% to 27% of pregnancies, with many causes that range from a normal pregnancy to an ectopic pregnancy (pregnancy outside the uterus). The main imaging test recommended is transvaginal ultrasound (US) (https://www.radiologyinfo.org/en/info/pelvus) , which when combined with blood tests and the mother's signs and symptoms can identify the cause of bleeding.

Transabdominal US may be appropriate, usually in conjunction with transvaginal US, later in the first trimester rather than early in the first trimester. For the large majority of cases, transabdominal US and transvaginal US are the best imaging studies to guide management in individuals with vaginal bleeding in the first trimester.

Transvaginal US shows the gestation sac (the area of fluid around the embryo) at around 4.5 to 5 weeks of pregnancy and is the first feature that can show that the pregnancy is happening in the womb (intrauterine pregnancy). However, confirming a viable intrauterine pregnancy may require waiting until later in the first trimester when the yolk sac and/or embryo can be seen and embryonic cardiac activity can be checked. When there are symptoms that are suspicious for an ectopic pregnancy, both transvaginal and transabdominal US may be used. MR and CT are not usually used in the evaluation for first trimester vaginal bleeding but are used in certain clinical settings.

For more information, see the Abnormal Vaginal Bleeding page (https://www.radiologyinfo.org/en/info/vaginalbleeding) .

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