

Placental Diseases

Patient Information Series – What you should know, what you should ask.

What is the importance of the Placenta?

The placenta has embryonic and maternal blood vessels and, thus, it is possible to perform gas exchange, remove waste from the embryo and provide nutrients and immunity. In addition to these functions, the placenta also produces hormones of great importance for the maintenance of pregnancy, namely HCG, estrogens and progesterone. For this reason, everything that involves possible placental changes raises concerns, both for the obstetrician and for patients. This patient information material will discuss some of the more common placental conditions that may be diagnosed on a standard ultrasound imaging study.

What is Placental Subchorionic Hematoma?

A condition that affects about 5% of pregnant women, a placental subchorionic hematoma is formed due to an accumulation of blood between the gestational sac (structure that precedes the placenta) and the uterine wall. It is a common cause for bleeding from the vagina in early pregnancy although it can be detected incidentally, in the absence of symptoms, on first trimester ultrasound.

The hematoma occurs, most of the time, because the sac is not implanted correctly, leaving a lack of contact of the sac with the uterine wall, which favors the appearance of the hematoma. The diagnosis is made through an ultrasound examination, which appears as a dark area of fluid collection of varying size, between the gestational sac and the wall of the uterus. It can resolve overtime as the pregnancy advances. Although this finding may be distressing for patients, the prognosis for the pregnancy is generally good, especially in the absence of other signs such as uterine cramping.

What causes placental infarction?

Placental infarction different type of placental lesion and one of the most common findings when placentas are examined by pathologists after birth. Infarcts are due to thrombosis (clotting) in placental vessels. When extensive, this can cause interruption of blood flow to the baby. Thrombosis is an obstruction of arteries and veins, caused by clots that form in the blood vessels and this complication is more common in cases of inherited clotting disorders, such as thrombophilia, or in pregnancies complicated by hypertension. Placental infarcts can often be identified on ultrasound as round, dark areas within the placenta or at its margin, surrounded by bright borders. Their clinical significance, when isolated or found incidentally, may not affect clinical outcome, but when extensive, may indicate a significant clinical problem placing the pregnancy at high risk of compromise.

In high-risk pregnancies, examination of the placenta by a pathologist after birth can reveal clues to underlying maternal or fetal conditions that can lead to adverse outcome. With this knowledge, your care provider may be able to suggest management strategies to decrease recurrence of these events in future pregnancy.

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