



## **PLACENTAL ABRUPTION**

### **ALTERNATIVE NAMES**

Premature separation of placenta; Accidental hemorrhage; Ablatio placentae; Abruptio placentae

### **DEFINITION**

The separation of the placenta from the site of uterine implantation before delivery of the fetus.

### **CAUSES AND RISKS**

It is frequently difficult to determine the exact causes of placental abruption. Definable, direct causes that trigger placental abruption are quite rare (1 to 5%). They include mechanical factors such as abdominal trauma (for example, from an auto accident or fall), sudden loss in uterine volume as occurs with rapid loss of amniotic fluid or the delivery of a first twin, or an abnormally short umbilical cord (usually only a problem at the time of delivery).

Predisposing factors include the following risk factors: a past medical history of placental abruption (after 1 prior episode there is a 10 to 17% recurrence, after 2 prior episodes the incidence of recurrence exceeds 20%); hypertension or high blood pressure during pregnancy is associated with 2.5 to 17.9% incidence; increased maternal age; increased number of prior deliveries; increased uterine distention (as may occur with multiple pregnancies or abnormally large volume of amniotic fluid); diabetes mellitus in the pregnant woman; cigarette smoking; cocaine abuse; and drinking alcohol during pregnancy (more than 14 drinks per week).

The incidence of placental abruption, including any amount of placental separation prior to delivery, is about 1 out of 150 deliveries. However, the severe form (resulting in fetal death) occurs only in about 1 out of 500 to 750 deliveries.

### **PREVENTION**

Avoiding behavioral risk factors, early and continuous prenatal care, and early recognition and adequate management of maternal conditions such as diabetes mellitus and hypertension decrease the risk of placental abruption.

## **SYMPTOMS**

- Vaginal bleeding
- Abdominal pain
- Back pain

## **SIGNS AND TESTS**

Physical examination reveals uterine tenderness and/or increased uterine tone. Hemorrhage or heavy bleeding in pregnancy may be visible or concealed.

Tests include:

- A CBC, may note decreased hematocrit or hemoglobin and platelets
- Prothrombin time test
- Partial thromboplastin time test
- Fibrinogen level test
- Abdominal ultrasound (may be done)

## **TREATMENT**

Treatment includes IV (intravenous) fluid replacement, blood transfusion, and careful monitoring of the mother for signs/symptoms of shock and for signs of fetal distress (fetal heart rate too high or too low, or abnormal fetal heart rate changes in relation to contractions). An emergency cesarean section may be necessary for fetal distress or maternal bleeding. In the event of an immature fetus and evidence of only a small placental separation, the mother may be hospitalized for observation and released after several days if no evidence of progressing abruptio occurs. If the fetus is mature, vaginal delivery may be chosen if maternal and fetal distress is minimal; otherwise, a cesarean section may be the preferred choice to protect the mother and the child.

## **PROGNOSIS**

Maternal mortality is uncommon. Maternal death rates in various parts of the world range from 0.5 to 5%. Early diagnosis of the condition and adequate intervention should decrease the maternal death rate to 0.5 to 1%. Fetal death rates range from 20-35 %. Fetal distress appears early in the condition in approximately 50% of cases. Concealed vaginal bleeding in pregnancy, excessive loss of blood resulting in shock, absence of labor, a closed cervix, and delayed diagnosis and treatment are unfavorable factors that may increase the risk of maternal or fetal death.

## **COMPLICATIONS**

Excessive loss of blood that may lead to shock and possible fetal and/or maternal death is the most obvious complication. If the site of placental attachment starts to hemorrhage after the delivery and loss of blood cannot be controlled by other means, a hysterectomy (removal of the uterus) may become necessary.

## **CALL YOUR HEALTH CARE PROVIDER IF**

Call your health care provider if you are pregnant and symptoms of placental abruption develop. This may rapidly become an emergency condition that threatens both the mother and the baby. Key symptoms include sudden constant abdominal pain and/or unexpected, significant bleeding.

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Date Published: 2004-03-23

### **Health Information Provided by Women's Health Specialists**

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