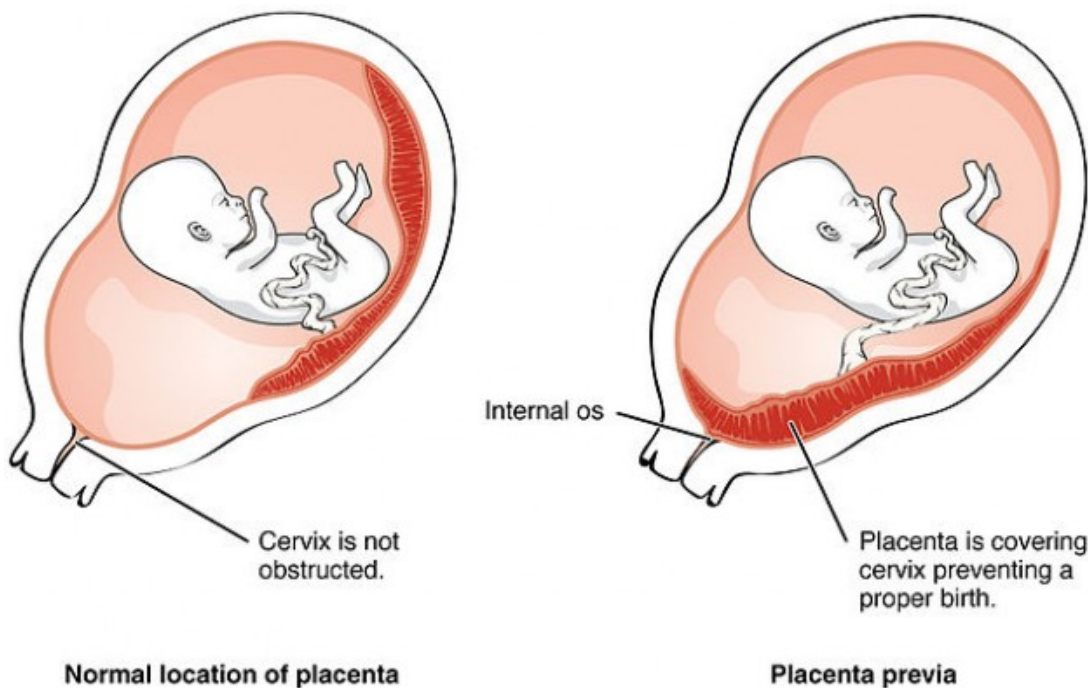


Premature Placenta Detachment and Placenta Praevia

[See online here](#)

In the context of precocious pregnancy, flawed implantation of the placenta is possible. This can remain asymptomatic in the beginning. However, bleeding mostly occurs during the end stages of pregnancy. Also, vaginal bleeding can be the cause of premature placenta detachment. This bleeding is life-threatening to both the mother and child and is very painful. In the following article, the clinical picture of premature placenta detachment and placenta praevia are further explained together with their differential diagnosis.



Placenta Praevia

Definition of Placenta Praevia

Placenta praevia refers to the dystopic position of the placenta in the **isthmus region**. Roughly 10 out of 200 pregnancies are affected by this condition.

Etiology of Placenta Praevia

Lesions of the **endometrium** can be the cause of placenta praevia. Amongst others, a curettage, a condition after a C-section or after pregnancy with multiples can lead to these lesions.

Clinic of Placenta Praevia

By means of uterus contraction, the lower uterine segment is stretched. This shears the placenta away from the adhesive surface causing bleeding to occur.

Typically, the first bleeding is observed in the 3rd trimester. Initially, this bleeding happens out of the intravillous region. This means that it is maternal blood. Later, it can also be fetal blood. Thus, controls of the blood for HbF are indicated.

Diagnostics of Placenta Praevia

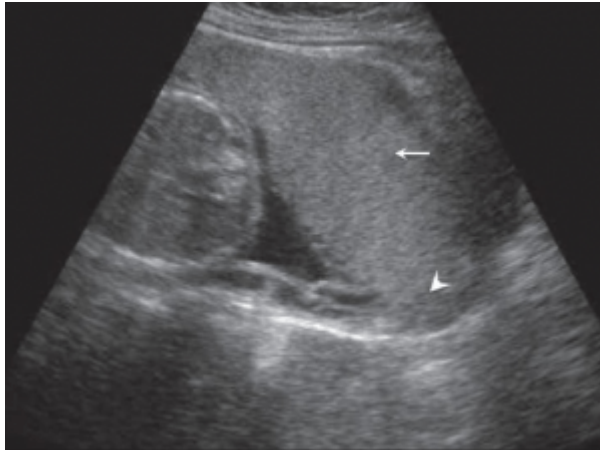


Image: "Anterior placenta previa. The placenta (arrow) has covered the internal os completely (arrowhead)" by Openi.
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Diagnosis of placenta praevia is conducted using an ultrasound examination. The pregnant woman is then hospitalized and strict bed rest is indicated.

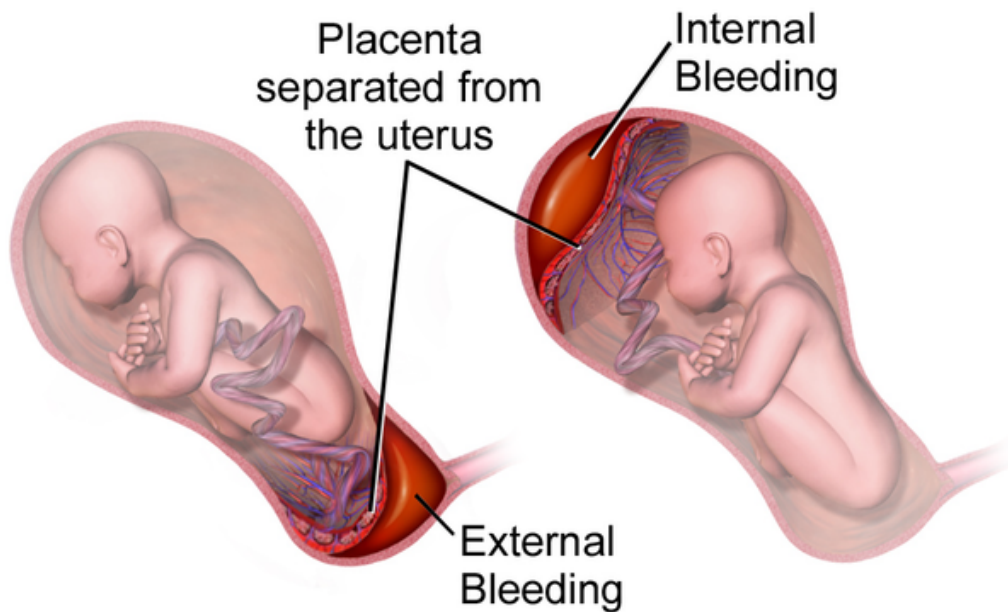
Note: in the presence of these symptoms, vaginal palpation examination is strictly contraindicated.

Therapy of Placenta Praevia

In exceptional cases, a vaginal birth attempt can be made. In most cases, however, a **Cesarean section** should be considered. In case of little bleeding before the 34th week of pregnancy, tocolysis should be performed and then a Cesarean section should be planned.

Premature Placenta Detachment

Definition of Premature Placenta Detachment



Abruptio Placenta (Placental Abruption)

Image: "Placental Abruption" by BruceBlaus. License: [CC BY 3.0](https://creativecommons.org/licenses/by/3.0/)

This corresponds to a complete or partial detachment of the placenta before the birth of the child. This situation represents a dramatic emergency for the mother and child.

Pathogenesis of Premature Placenta Detachment

Often, hypertensive pregnancy diseases or uterus abnormalities lead to premature detachment of the placenta. Due to these conditions, bleeding out of the **uterine vessels** can occur. Thus, a **retroplacental hematoma** develops, which leads to the detachment of the placenta.

Clinic of Premature Placenta Detachment

Usually, sudden severe abdominal pain is presented. Additionally, vaginal bleeding and continuously contracted uterus are present. This high-acute situation threatens the child due to an insufficient supply of oxygen. Usually, **acute hypoxia** results. The severe blood loss endangers the mother. Also, an **amniotic fluid embolism** can occur with an **acute coagulation** disorder.

Diagnostics of Premature Placenta Detachment

In clinical examinations, the uterus is very rigid and very pressure-sensitive. The movements of the child decreases due to hypoxia and CTG becomes pathological.

Therapy of Premature Placenta Detachment

Only an emergency C-section can save a child's life.

Review Questions

The correct answers can be found below the references.

1. A pregnant woman in the 25th + 3 weeks of pregnancy presents with sudden severe abdominal pain and vaginal bleeding. Which is the most likely diagnosis?

- A. Placenta praevia
- B. Placenta insufficiency
- C. Premature placenta detachment
- D. Sigma diverticulitis
- E. Appendicitis

2. Which therapy is the right choice in the above-mentioned case?

- A. Cesarean section
- B. Spontaneous birth
- C. Treatment with metoprolol
- D. Vacuum extraction
- E. Water birth

3. Which is the leading symptom of placenta praevia?

- A. Pressure-sensitive vaginal bleeding
- B. Growth retardation of the child
- C. Dystrophic fetus
- D. Painless vaginal bleeding
- E. Decreased amount of amniotic fluid

References

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Correct answers: 1C, 2A, 3D

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