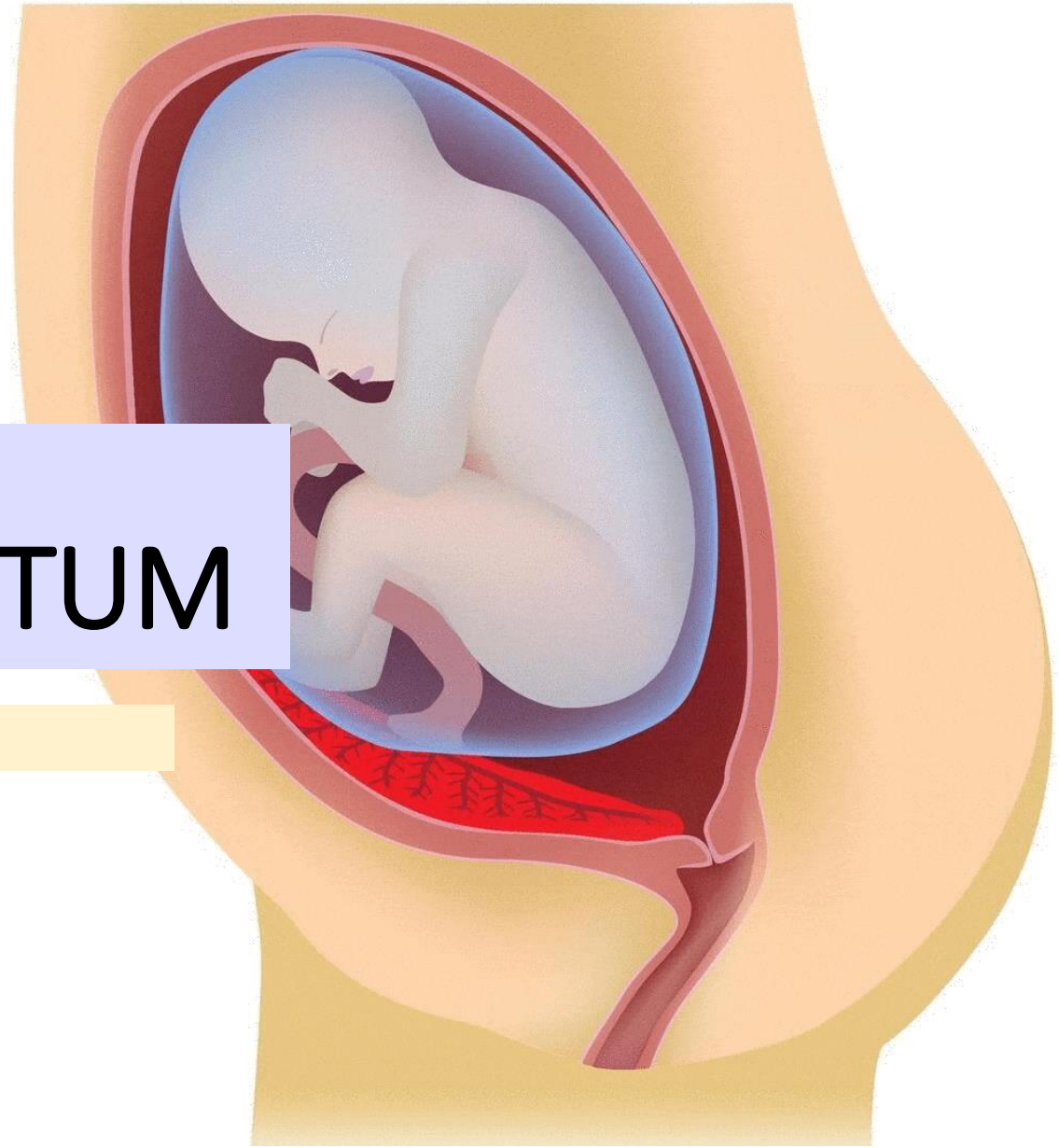
PERDARAHAN ANTEPARTUM

Alfrida Kurnia Ardhanti - 1810211138 - Tutorial A1



Perdarahan antepartum adalah perdarahan yang terjadi setelah kehamilan 28 minggu. Biasanya lebih banyak dan lebih berbahaya daripada perdarahan kehamilan sebelum 28 minggu

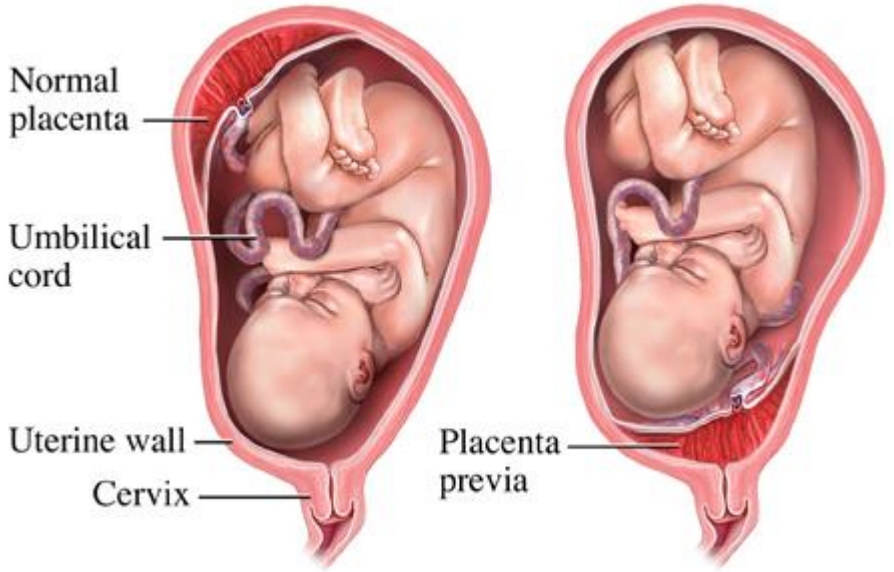
Terdapat beberapa definisi yang dapat digunakan untuk menggambarkan perdarahan antepartum:

- Spotting – terdapat bercak darah pada pakaian dalam
- Perdarahan minor – kehilangan darah < 50 mL
- Perdarahan mayor – kehilangan darah 50–1000 mL tanpa tanda klinis syok
- Perdarahan masif – kehilangan darah > 1000 mL dengan/tanpa tanda klinis syok

Possible anatomic causes of third-trimester bleeding are listed in Box 16.1.

BOX 16.1 Causes of Bleeding in the Second Half of Pregnancy

- Anal
  - Hemorrhoids
  - Trauma—tears and lacerations
- Vulvar
  - Varicose veins
  - Trauma—tears and lacerations
- Vaginal
  - Trauma—tears and lacerations
- Cervical
  - Labor
  - Cervicitis
  - Polyp
  - Ectropion
  - Friable glandular tissue
  - Trauma—tears and lacerations
  - Carcinoma
- Uterine
  - Uterine rupture
  - Placenta previa
  - Placental abruption
  - Vasa previa



PLASENTA PREVIA

Plasenta previa adalah plasenta yang berimplantasi pada segmen bawah rahim (SBR) sehingga menutupi seluruh atau sebagian dari ostium uteri internum (OUI).

Epidemiologi

- Kejadian plasenta previa bervariasi antara 0,3-0,5% dari seluruh kehamilan (1 dari 200 kehamilan)
- Insiden tertinggi dijumpai di usia kehamilan 24 minggu
- Dari seluruh kasus perdarahan antepartum, plasenta previa merupakan penyebab terbanyak
- Plasenta previa lebih banyak pada kehamilan dengan paritas tinggi dari pada usia diatas 30 tahun
- lebih sering pada kehamilan ganda daripada kehamilan tunggal

Etiologi

- Posisi implantasi zigot di area bawah cavitas uterus (dekat dengan ostium uterus interna)
- Defective decidual vascularization karena inflamasi atau atrofi

BOX 18-2 RISK FACTORS FOR PLACENTA PREVIA

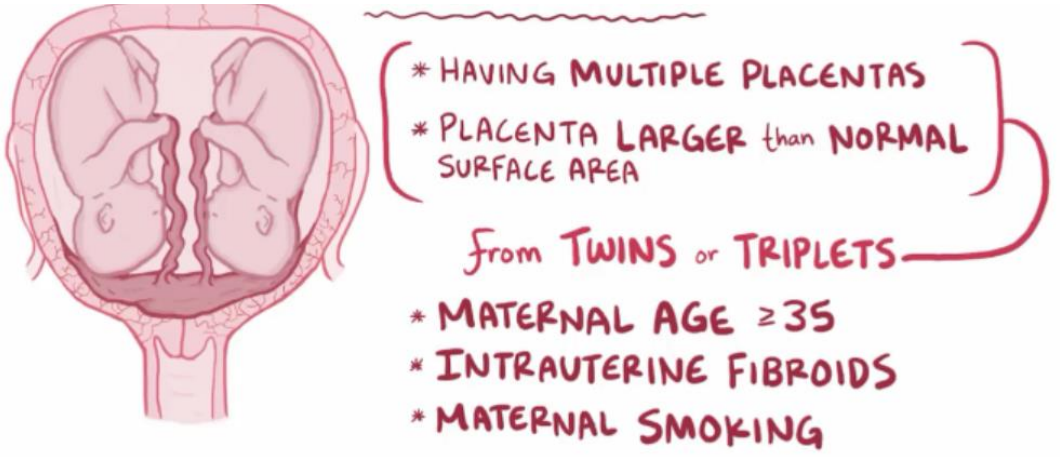
Intrinsic maternal factors
- Increasing parity
- Advanced maternal age
- Maternal race

Extrinsic maternal factors
- Cigarette smoking
- Cocaine use
- Residence at higher elevation
- Infertility treatments

Fetal factors
- Multiple gestations
- Male fetus

Prior placenta previa

Prior uterine surgery and cesarean delivery



- Smoking → The nicotine and carbon monoxide, found in cigarettes, act as potent vasoconstrictors of placental vessels; this compromises the placental blood flow thus leading to abnormal placentation

#The relationship between advanced maternal age and placenta previa may be confounded by higher parity and a higher probability of previous uterine procedures or fertility treatment

Klasifikasi Plasenta Previa

Plasenta previa komplit/total

- plasenta yang menutupi seluruh ostium uteri internum.
- pada jenis ini, jelas tidak mungkin bayi dilahirkan secara normal, karena risiko perdarahan sangat hebat.

Plasenta previa parsial

- plasenta yang menutupi sebagian ostium uteri internum.
- pada jenis inipun risiko perdarahan sangat besar, dan biasanya janin tetap tidak dilahirkan secara normal.

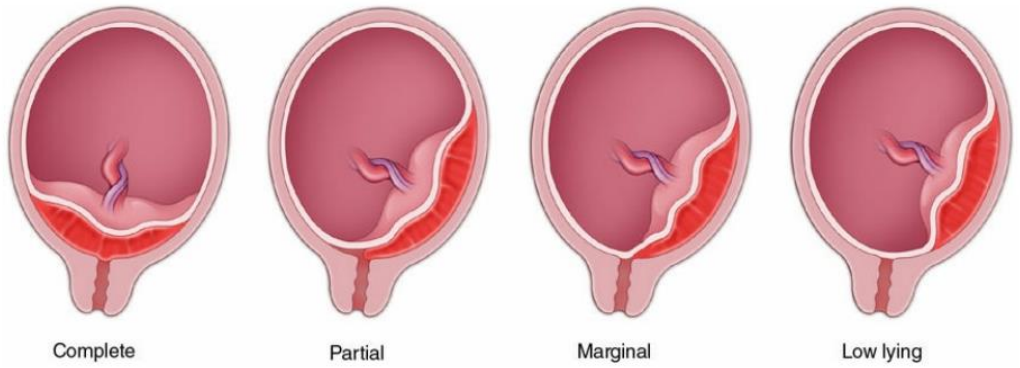


FIGURE 16.1. Placenta previa. (Adapted from Oyelese Y, Smulian JC. Placenta previa, accreta, and vasa previa. *Obstet Gynecol*. 2006;10(4):927.)

Klasifikasi Plasenta Previa

Plasenta previa marginalis

- plasenta yang tepinya berada pada pinggir ostium uteri internum.
- hanya bagian tepi plasenta yang menutupi jalan lahir. Janin bisa dilahirkan secara normal, tetapi risiko perdarahan tetap besar..

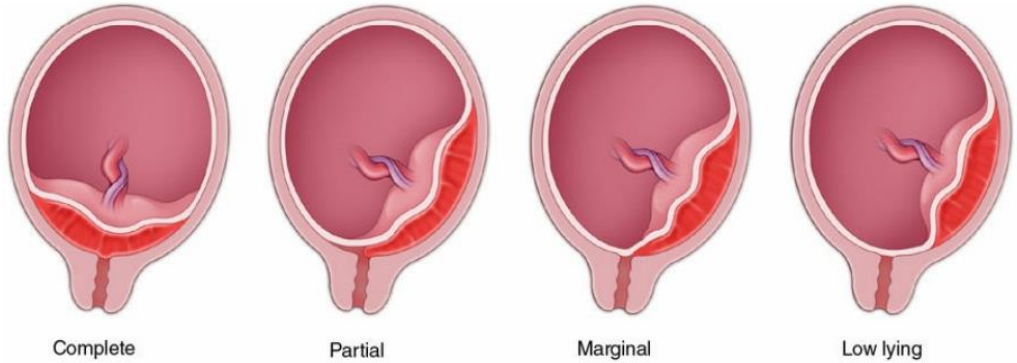


FIGURE 16.1. Placenta previa. (Adapted from Oyelese Y, Smulian JC. Placenta previa, accreta, and vasa previa. *Obstet Gynecol.* 2006;10(4):927.)

Plasenta letak rendah / plasenta lateralis / dangerous placenta

- plasenta yang berimplantasi pada segmen bawah rahim sehingga tepi bawahnya berada pada jarak lebih kurang 2 cm dari ostium uteri internum
- Jarak yang lebih dari 2 cm dianggap plasenta letak normal
- Risiko perdarahan tetap ada namun tidak besar, dan janin bisa dilahirkan secara normal asal tetap berhati-hati

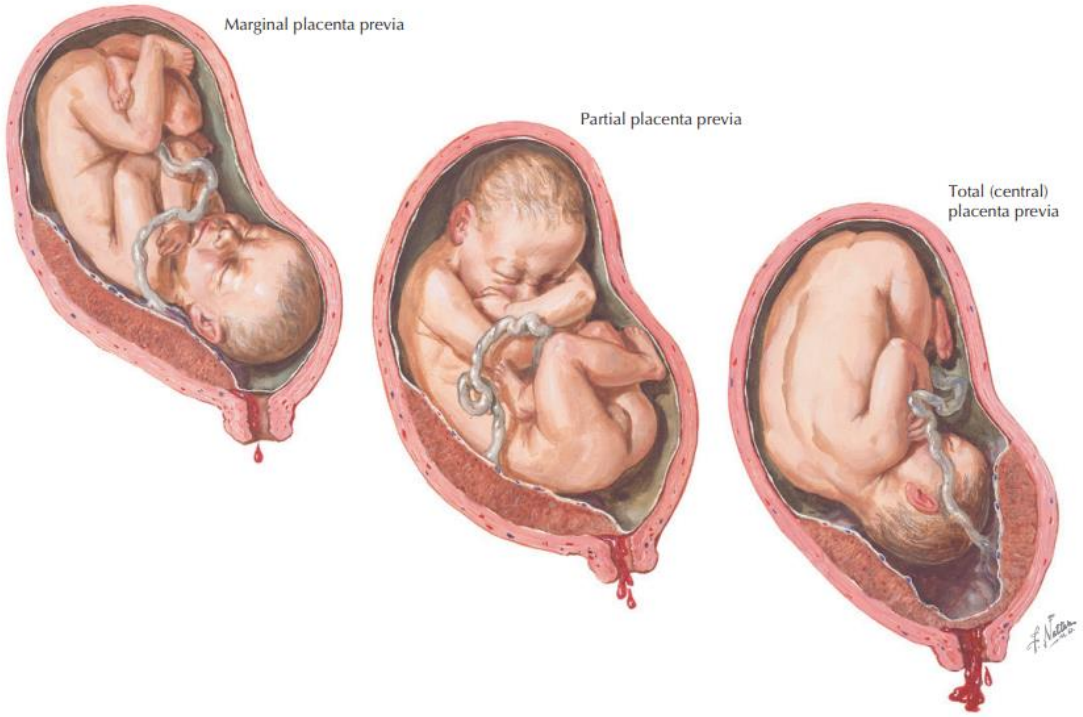
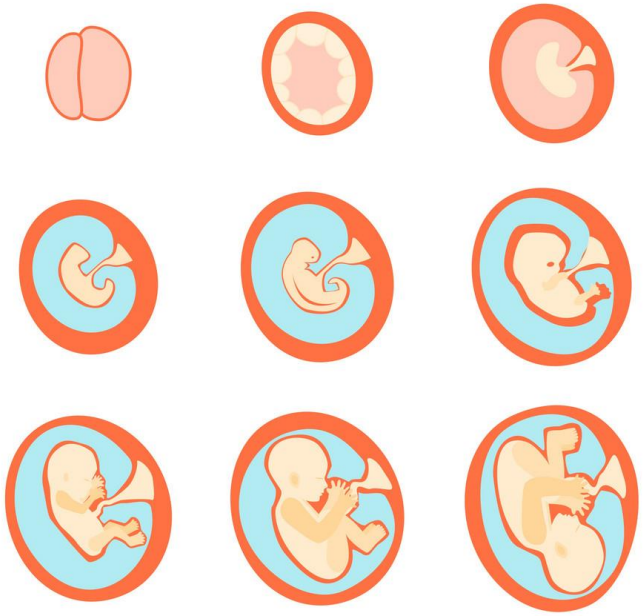
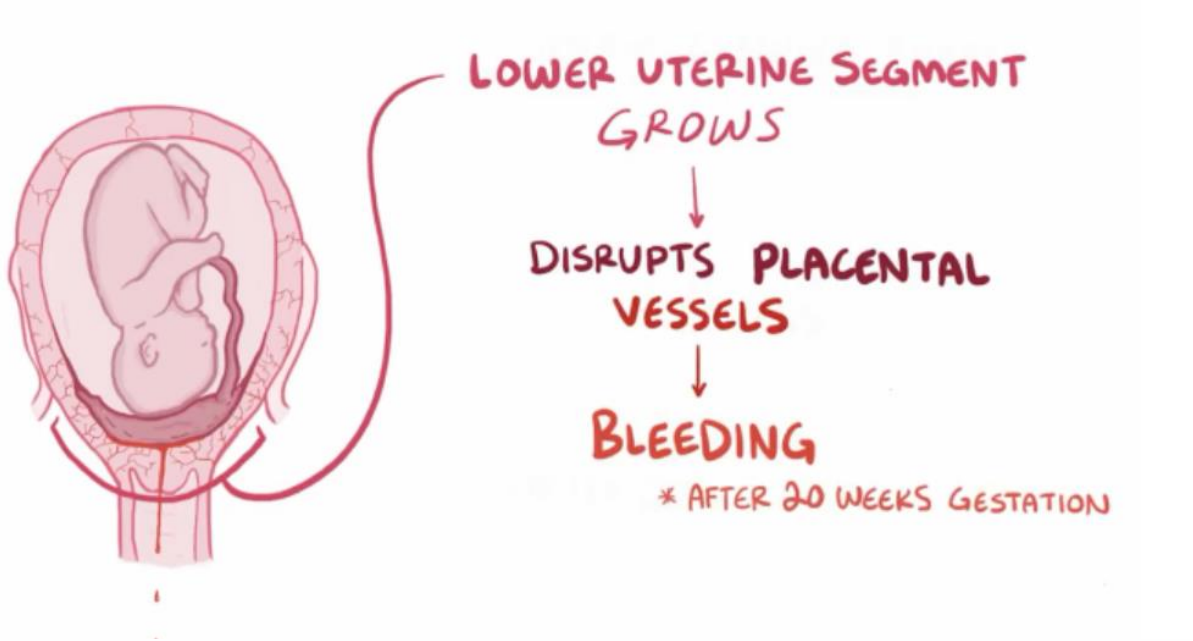
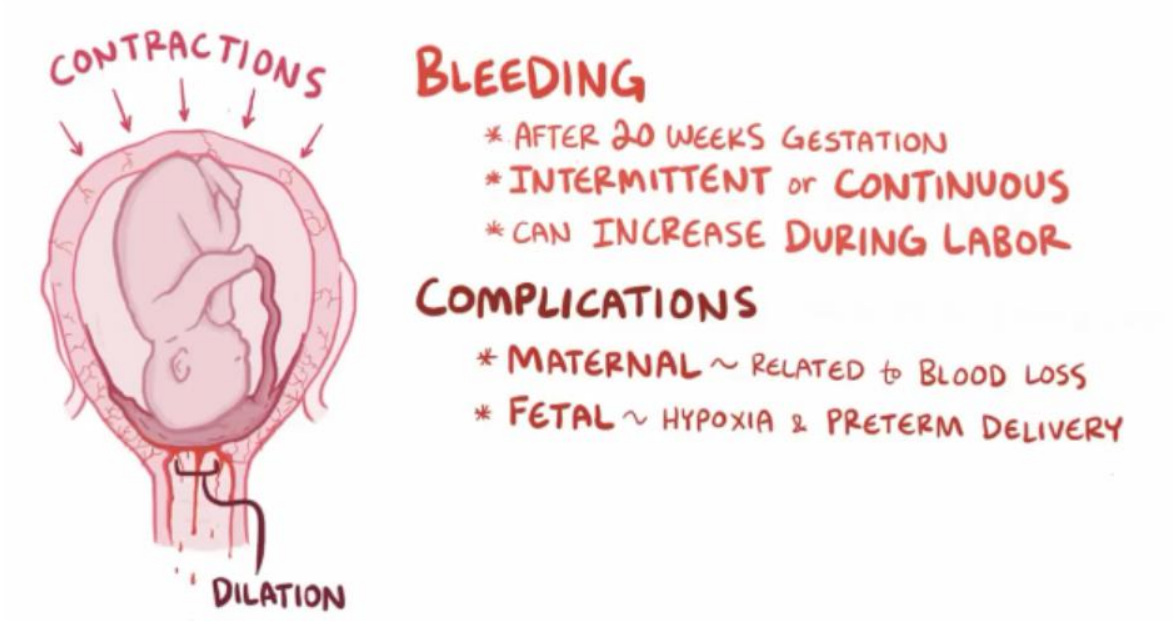


Figure 234.1 Placenta previa



Complete placenta previa rarely resolves spontaneously, but partial and low-lying placenta previa will often resolve by 32 to 35 weeks of gestation. The mechanism of this resolution does not involve an upward “migration” of the placenta but, rather, a stretching and thinning of the lower uterine segment, which effectively moves the placenta away from the os.





Sign and Symptoms

- Painless bleeding in the 3rd trimester of pregnancy
- 75% women with placenta previa at least have one episode of bleeding
- This episode of bleeding occur at around 29-30 weeks of gestation
- Uterine hyperactivity possibly present with bleeding (20%)
- Heavy or prolonged bleeding after delivery

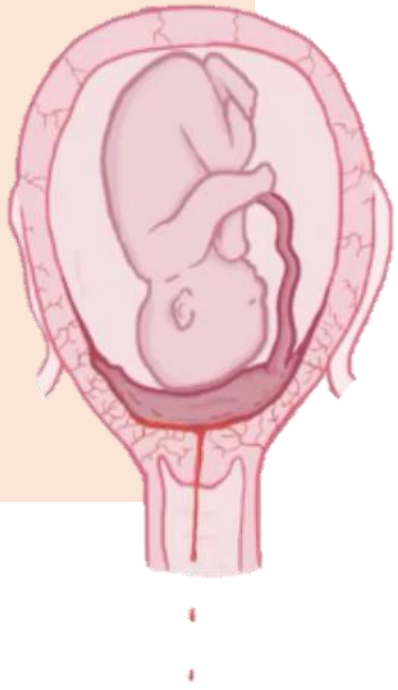
DIAGNOSIS

HISTORY

- Painless 3rd trimester bleeding was a common presentation for placenta previa in the past, whereas most cases of placenta previa are now detected antenatally with ultrasound prior to the onset of significant bleeding.
- The bleeding may be provoked from intercourse, vaginal examinations, labor, and at times there may be no identifiable cause.

PHYSICAL EXAM

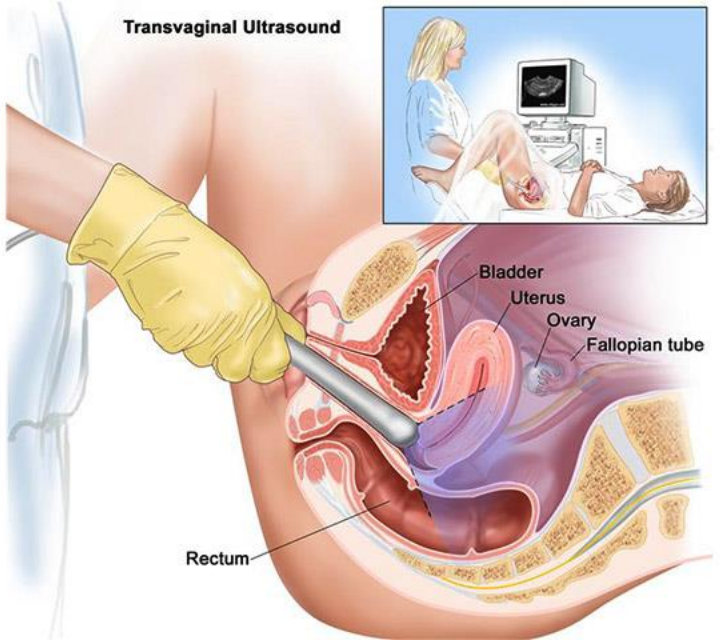
- On speculum examination, there may be minimal bleeding to active bleeding.
- Sometimes the placenta can be visualized on speculum examination if the cervix is dilated.
- A digital examination should be avoided to prevent massive hemorrhage

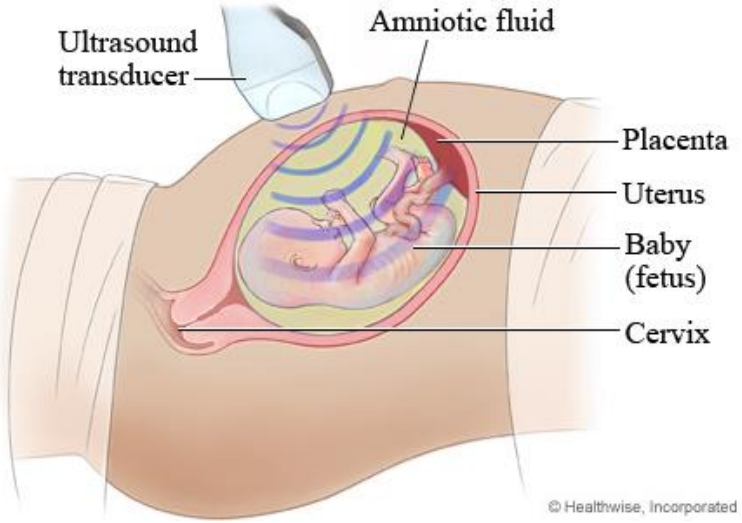


DIAGNOSIS

ULTRASONOGRAPHY

- A patient presenting with vaginal bleeding in the second or third trimester should receive a transabdominal sonogram before a digital examination
- If there is a concern for placenta previa, then a transvaginal sonogram should be performed to confirm the location of the placenta





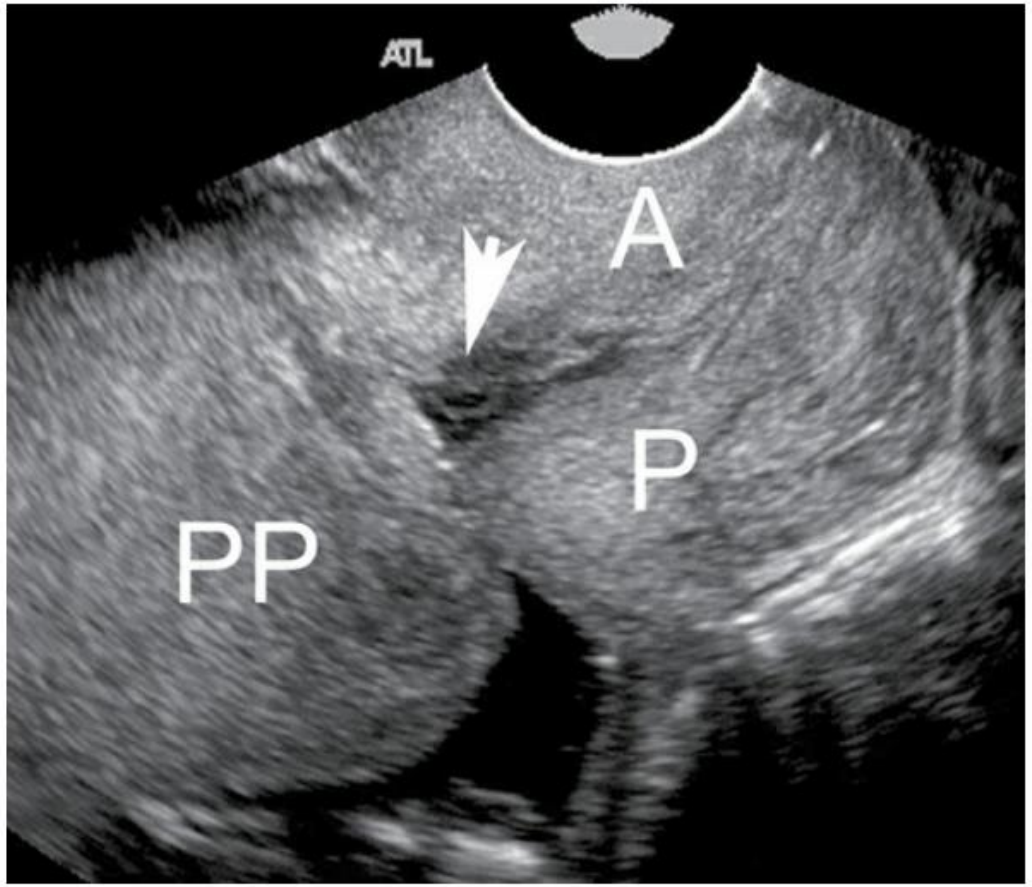


FIGURE 16.2. Transvaginal sonogram of a complete placenta previa (PP). Note that both the placenta and the internal cervical os *(arrow)* are clearly depicted. *A*, anterior lip of cervix; *P*, posterior lip of cervix. The placenta just overlaps the internal os. (From Oyelese Y, Smulian JC. Placenta previa, accreta, and vasa previa. *Obstet Gynecol*. 2006;107(4):927.)

If a placenta previa or low-lying placenta is diagnosed in the second trimester, repeat sonography should be obtained in the early third trimester at 32 weeks.

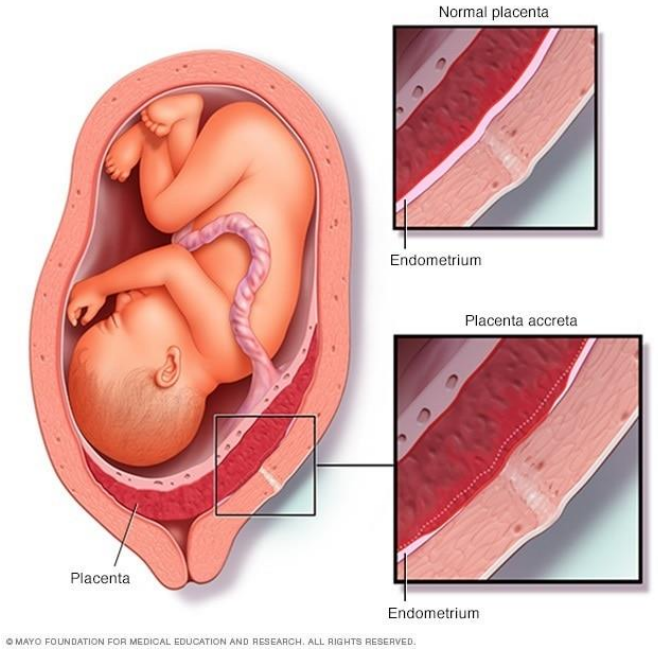
Management for Placenta Previa

- The first bleeding episode usually ceases in 1 to 2 hours if it was not severe enough to require delivery
- Close observation, frequent blood pressure measurements, fluid administration, bed rest, and administration of steroids for fetal lung maturity may be appropriate if the fetus is premature and the bleeding is not heavy enough to warrant immediate delivery
- For patients in a stable condition, cesarean delivery between 36 0/7 and 37 6/7 weeks is indicated. Delivery via caesarean birth is the rule unless it occurs earlier in pregnancy (i.e., at 20 weeks).

Expected Outcome: Generally good—25%–30% of patients complete 36 weeks of gestation despite labor or repetitive bleeding.

Complications

- Complications of placenta previa include increased bleeding from the lower uterine segment where the placenta was attached at the time of cesarean delivery, fetal complication : prematurity
- placenta accrete → Placenta accreta represents the abnormal attachment of the placenta to the uterine lining due to an absence of the decidua basalis and an incomplete development of the fibrinoid layer.

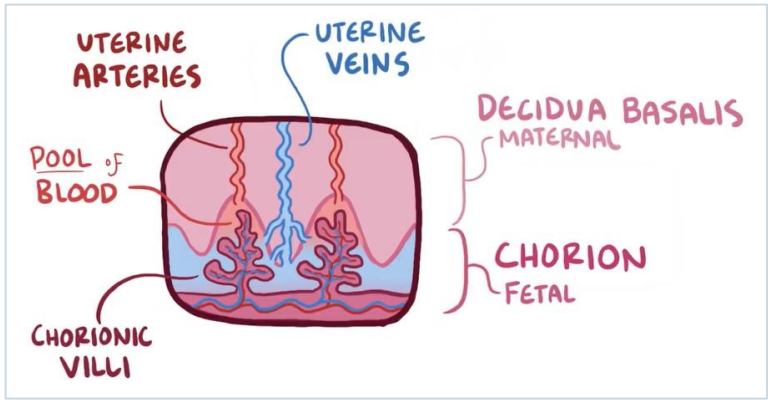


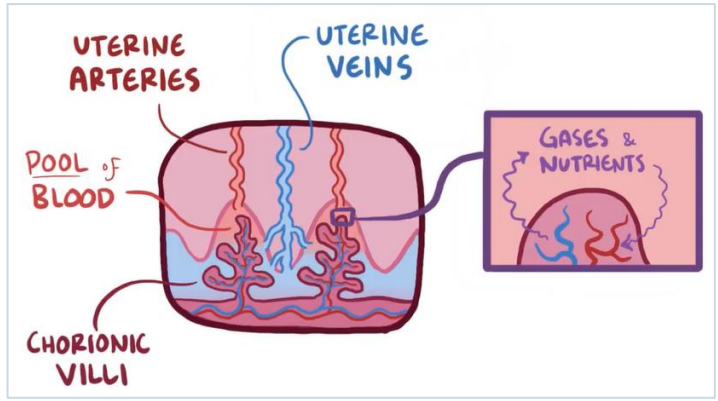
SOLUSIO PLASENTA/ PLACENTA ABRUPTION

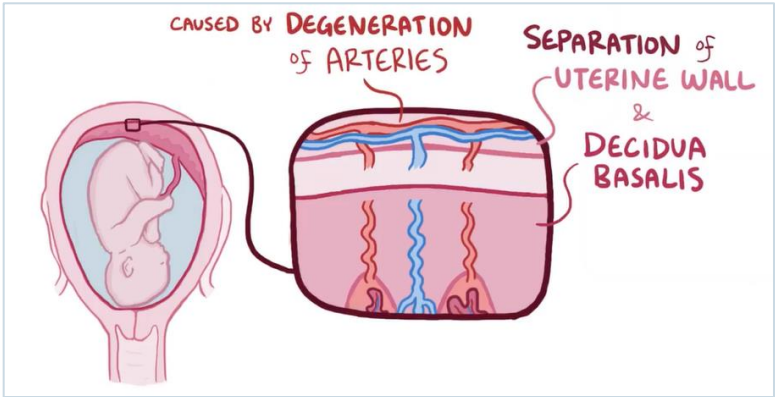
Solusio plasenta adalah suatu keadaan dalam kehamilan viable, dimana plasenta yang tempat implantasinya normal (pada fundus atau korpus) terkelupas atau terlepas sebelum janin lahir

Epidemiologi

- Insidensi abruptio plasenta sekitar 1 dari 100 kelahiran
- 1/3 perdarahan antepartum disebabkan karena solusio plasenta
- Kejadian terjadi pada trimester ketiga (40-60%) terutama sebelum minggu ke 37 kehamilan

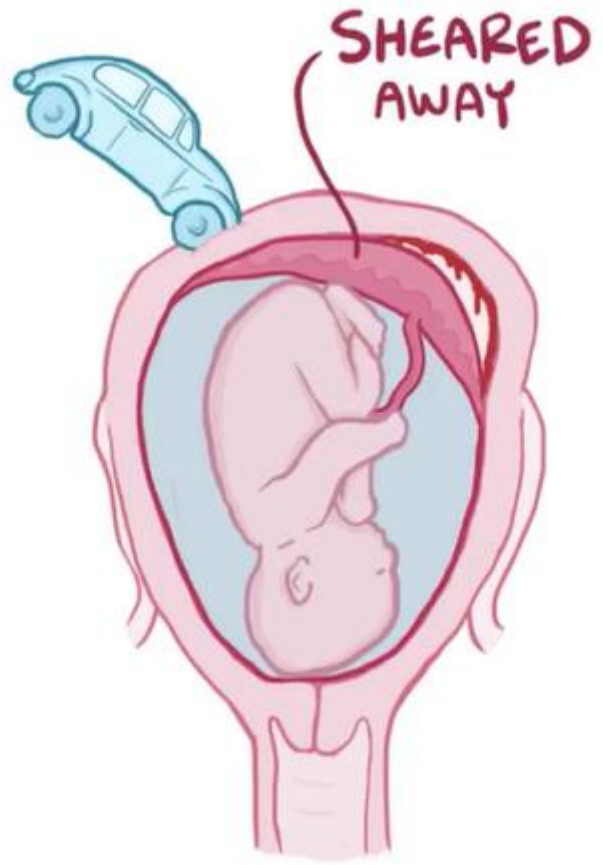






Faktor Risiko

- Hipertensi kronis, preeklampsia (paling sering)
- Trauma tumpul abdomen (kecelakaan, benturan,terjatuh)
- Penggunaan zat yang bersifat vasokonstriktif (rokok, kokain, metafetamine) → smoking more than 1 pack/ day (2.5-fold increased risk; risk increases by 40% for each pack/ day smoked
- Dekompresi uterus yang terlalu cepat (air ketuban pecah, kelahiran bayi kembar)
- Multiparitas dan usia kehamilan > 35 tahun
- Riwayat abrutio plasenta sebelumnya
- Ibu dengan trombofilia



Klasifikasi

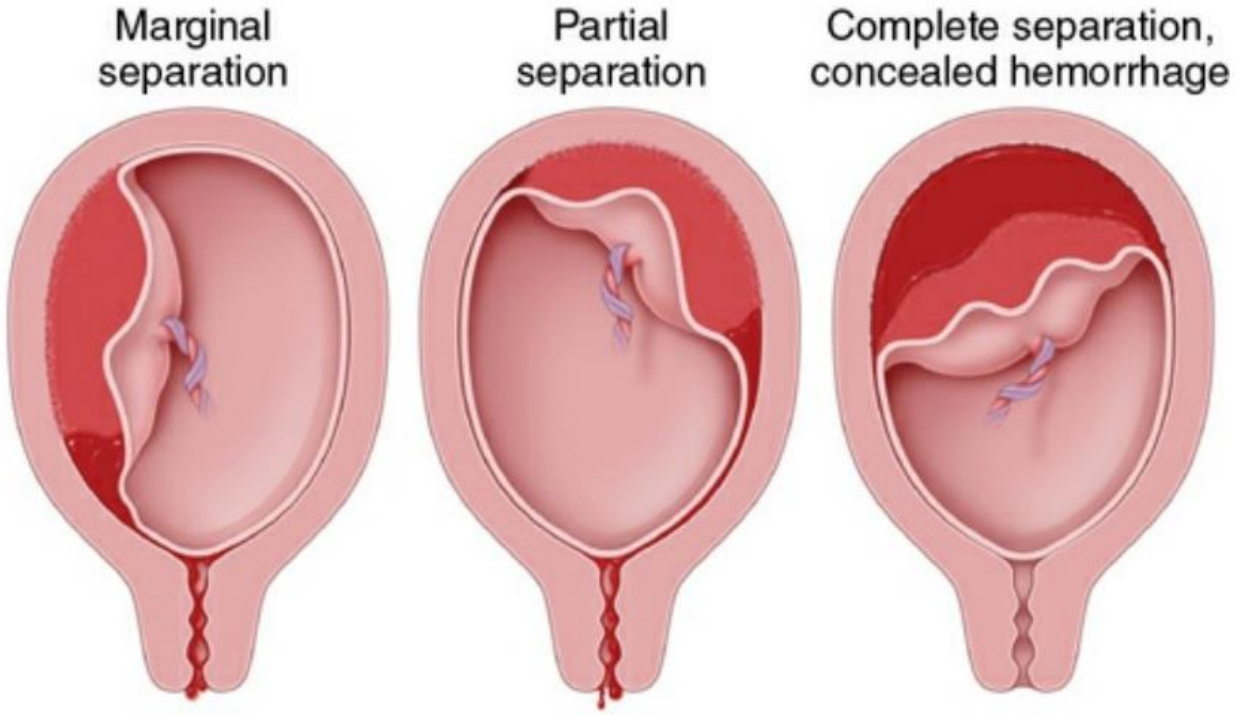
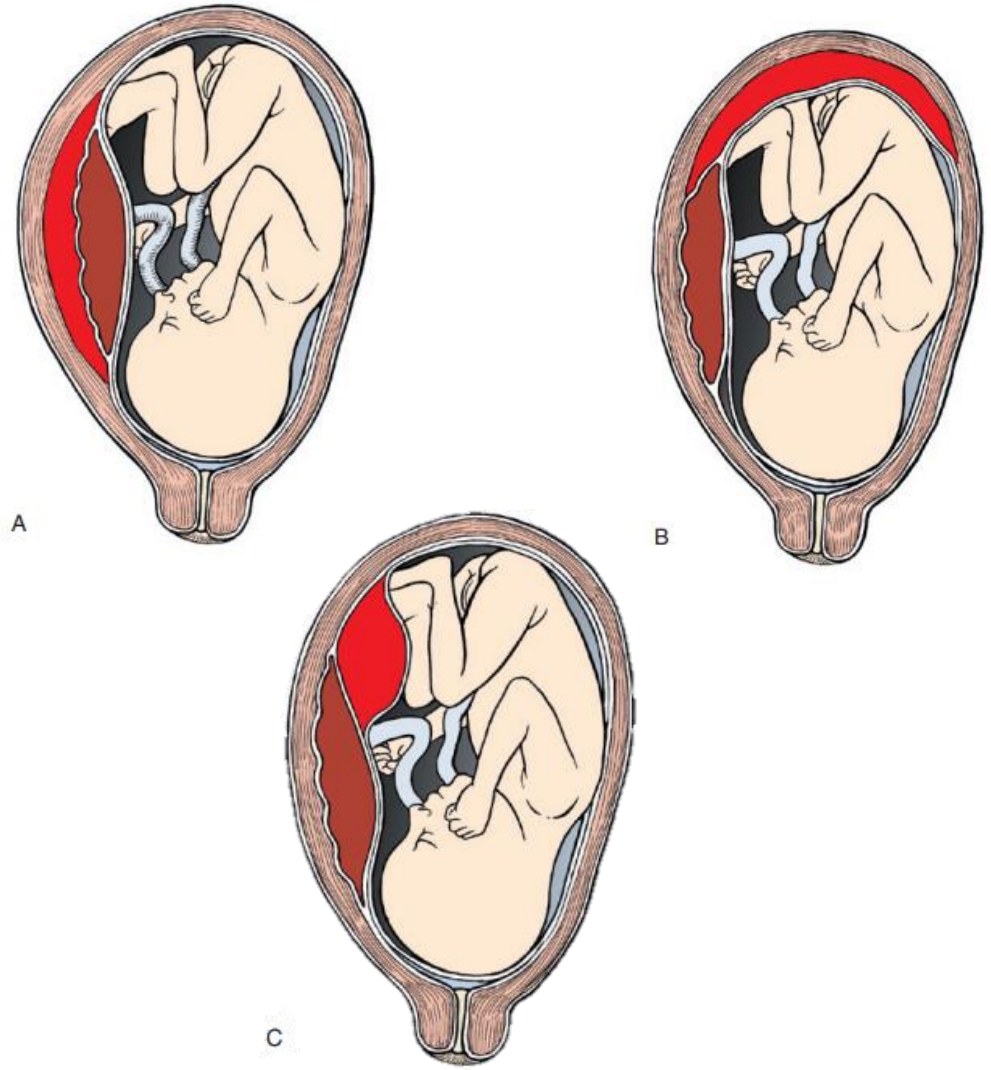


FIGURE 16.4. Types of placental abruption. Note that vaginal bleeding is absent when the hemorrhage is concealed.



- **subchorionic** (between the placenta and the membranes)
- **retroplacental** (between the placenta and the myometrium)
- **preplacental** (between the placenta and the amniotic fluid)

Retroplacental hematomas are associated with a worse prognosis for fetal survival than subchorionic hemorrhage.

The size of the hemorrhage is also predictive of fetal survival. Large retroplacental hemorrhages (>60 mL) have been associated with a 50% or greater fetal mortality, whereas similarly sized subchorionic hemorrhages are associated with a 10% mortality risk.2

FIG 18-2 The classification system of placental abruption. **A,** Retroplacental abruption. The bright red area represents a blood collection behind the placenta (*dark red*). **B,** Subchorionic abruption. The bright red area represents subchorionic bleeding, which is observed to dissect along the chorion. **C,** Preplacental abruption. The bright red area represents a blood collection anterior to the placenta within the amnion and chorion (subamniotic). (From Trop I, Levine D. Hemorrhage during pregnancy: sonography and MR imaging. *AJR Am J Roentgenol.* 2001;176:607.)

Gejala

- Perdarahan pervaginam (80%)
- Nyeri abdomen/nyeri punggung bawah
- Fetus bradikardi
- Iritabilitas uterus (nyeri tekan), takisistol, tetani, peningkatan tekanan intra uterus
- Hipotensi maternal atau tanda kehilangan darah (syok)
- Kematian janin

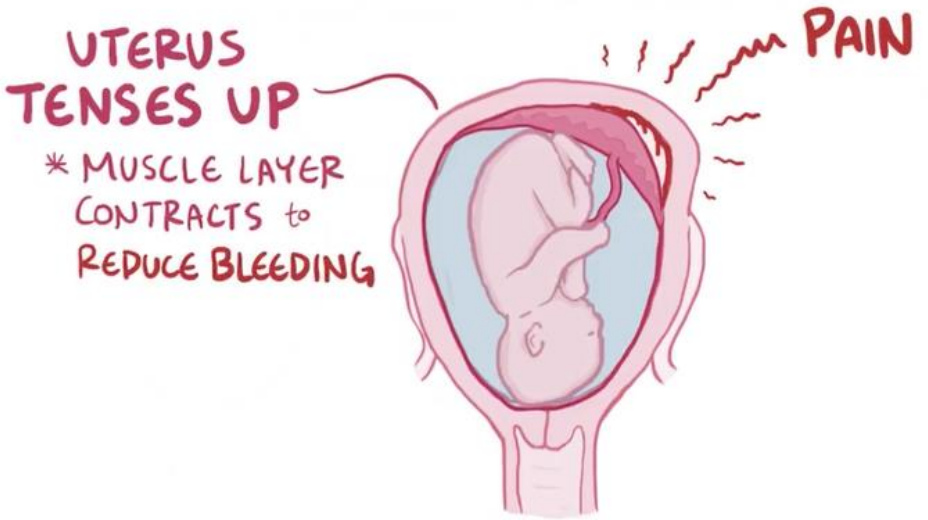


TABLE 16.1 CHARACTERISTICS OF PLACENTA PREVIA AND PLACENTAL ABRUPTION

Characteristic	Placenta Previa	Placental Abruption
Magnitude of blood loss	Variable	Variable
Duration	Often ceases within 1–2 hours	Usually continuous
Abdominal pain	Absent	Present, often severe
Fetal heart rate pattern on electronic monitoring	Normal	Tachycardia, then bradycardia; loss of variability; decelerations frequently present; intrauterine demise not rare
Coagulation defects	Rare	Associated, but infrequent; disseminated intravascular coagulation often severe when present
Associated history	Placenta previa in a prior pregnancy (4%–8% recurrence); prior cesarean delivery or other uterine surgery;	Chronic hypertension, preeclampsia; multiple gestation; advanced maternal age; multiparty; smoking; cocaine use; and chorioamnionitis. Trauma is also a major risk factor, and patients involved in a vehicle accident (even if wearing a seat belt), fall, or other trauma should
	multiparty; advanced maternal age; cocaine use; smoking	be evaluated for the possibility of abruption.

DIAGNOSIS

Placental abruption is primarily a clinical diagnosis that is supported by radiographic, laboratory, and pathologic studies.

ANAMNESIS

- Any findings of vaginal bleeding, uterine contractions, abdominal and/or back pain, or trauma should prompt an investigation for potential placental abruption.
- Vaginal bleeding may range from mild to severe
- Unfortunately, bleeding may be underestimated because it can be retained behind the placenta.

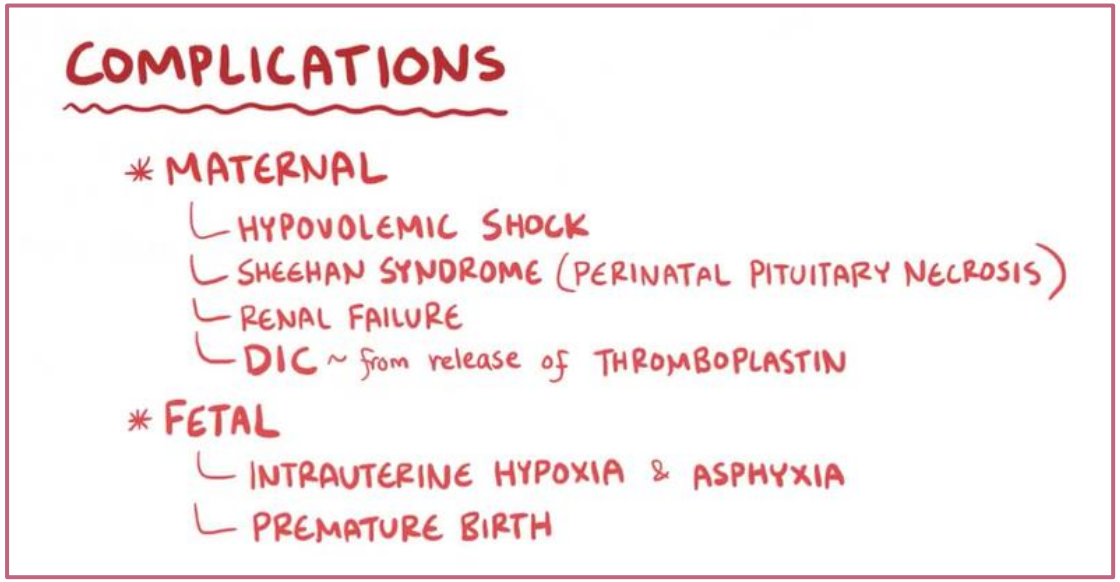
ULTRASONOGRAPHY

Ultrasound can identify three predominant locations for placental abruption

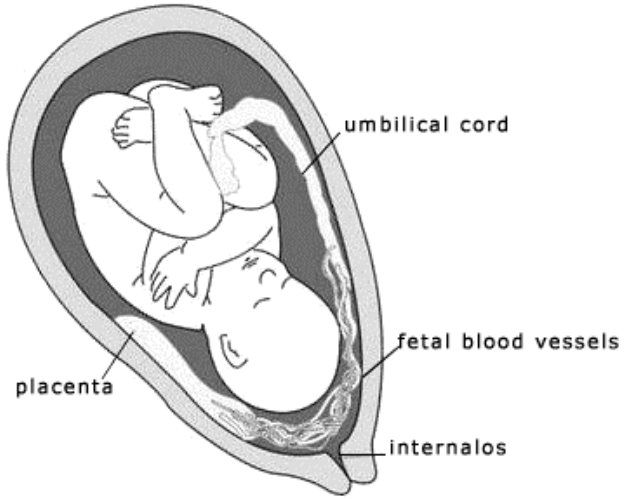
Magnetic resonance imaging (MRI) has been used occasionally for the diagnosis of placental abruption when sonography is equivocal

Management

- Management of patients with placental abruption includes monitoring of vital signs, fluid administration, and delivery for severe hemorrhage.
- Expectant management may be appropriate for preterm patients with less severe abruptions and minimal bleeding.
- Decision for delivery is based on fetal status, the amount of bleeding, and gestational age. Delivery is often by cesarean birth, but vaginal delivery frequently is possible, and may even follow a rapid labor.



VASA PREVIA



Vasa previa adalah keadaan dimana pembuluh darah janin berada di dalam selaput ketuban dan melewati ostium uteri internum untuk kemudian sampai ke dalam insersinya di tali pusat. Perdarahan terjadi bila selaput ketuban yang melewati pembukaan serviks robek atau pecah dan vaskular janinpun ikut terputus

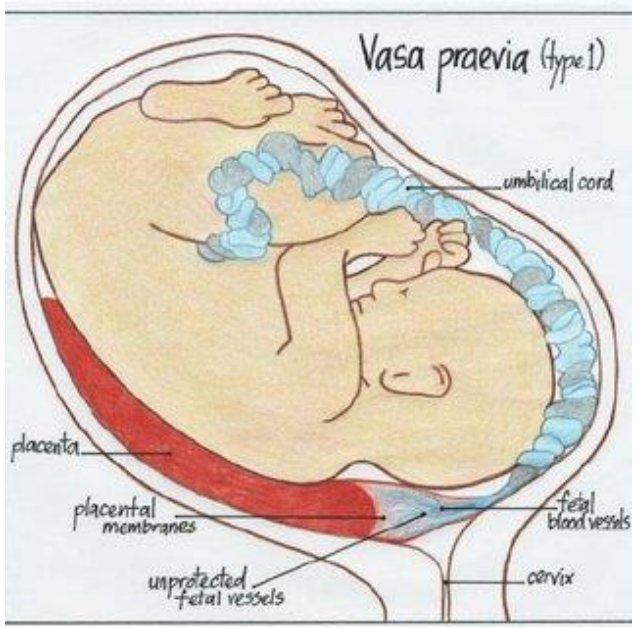
→ Intinya : ada pembuluh darah janin yang berjalan melewati jalan lahir

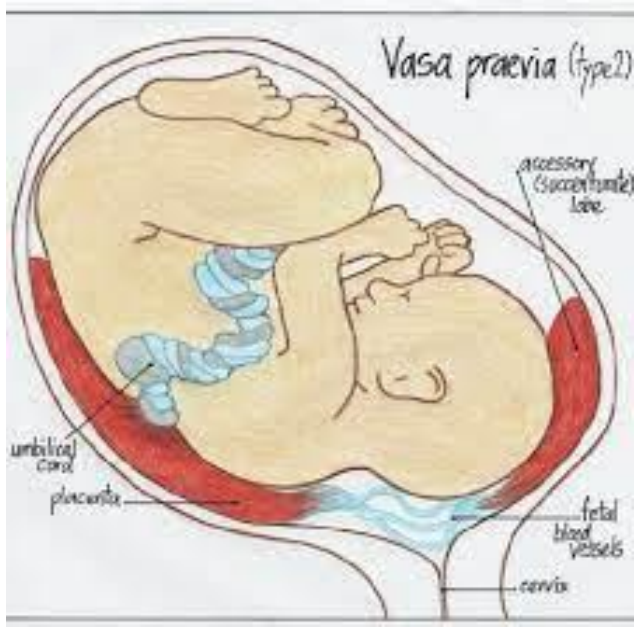
Incidence

- The overall incidence of vasa previa is 1 in 2500 deliveries
- Rare but very serious cause of vaginal bleeding

Risk Factor

1. Velamentous insertion of umbilical cord → tali pusar tidak menempel dibagian tengah plasenta namun menempel di membrane fetus
2. Multilobed placenta





Manifestasi Klinis

- Vaginal bleeding saat terjadi rupture membrane
- Pembuluh darah janin beresiko untuk rupture Ketika membrane yang mensupport rupture → resiko yang signifikan terhadap kondisi janin
- FHR → penurunan kecepatan, bradikardi, kematian janin
- Perdarahan juga dapat terjadi tanpa didahului rupture membrane → jarang terjadi
- Faktor Resiko: placenta rendah, plasenta praevia, kehamilan multiple, IVF dan insersi kord velamentus dan multilokal → tali pusat masuk secara tidak normal ke dalam plasenta

Diagnosis

ANAMNESIS

PEMERIKSAAN FISIK

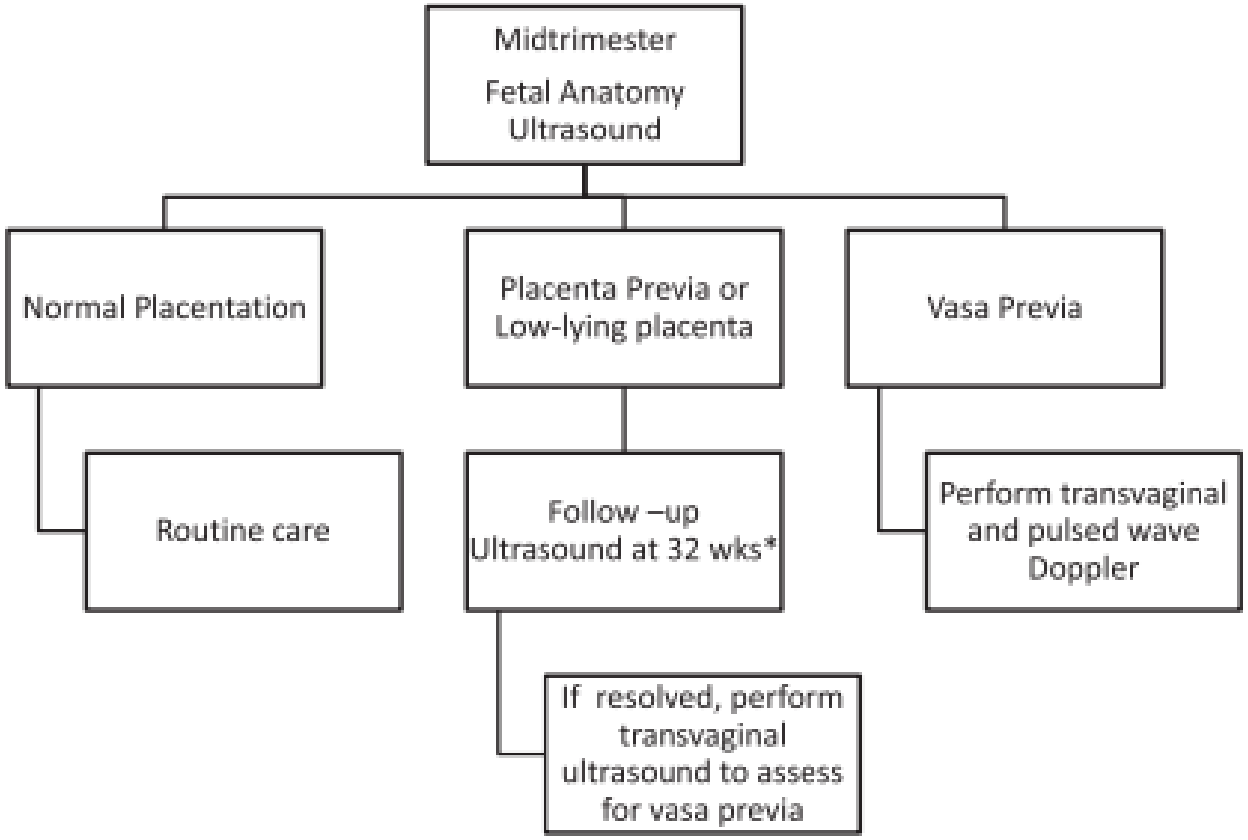
- Vaginal bleeding → nilai prediksi positif yang rendah
- Palpasi fetal→ memperkirakan lokasi placenta dan posisinya terhadap os cervical interna
- Dokumentasi insersi placental cord → velamentous placental cord insertion yang merupakan faktor risiko

PEMERIKSAAN PENUNJANG

- USG → struktur linear didepan os arterial dan vena dapat diidentifikasi oleh doppler
  TVSUG>>abdominal scan
- Low-lying placentas, penilaian FHR
- Overall, prenatal diagnosis is most effective around midpregnancy (18–24 weeks of gestation) but needs to be confirmed during the third trimester (30–32 weeks of gestation).

FIGURE 1

Algorithm for diagnosis of vasa previa



* These recommendations are for asymptomatic women; an earlier ultrasound study may be indicated in women who are bleeding.

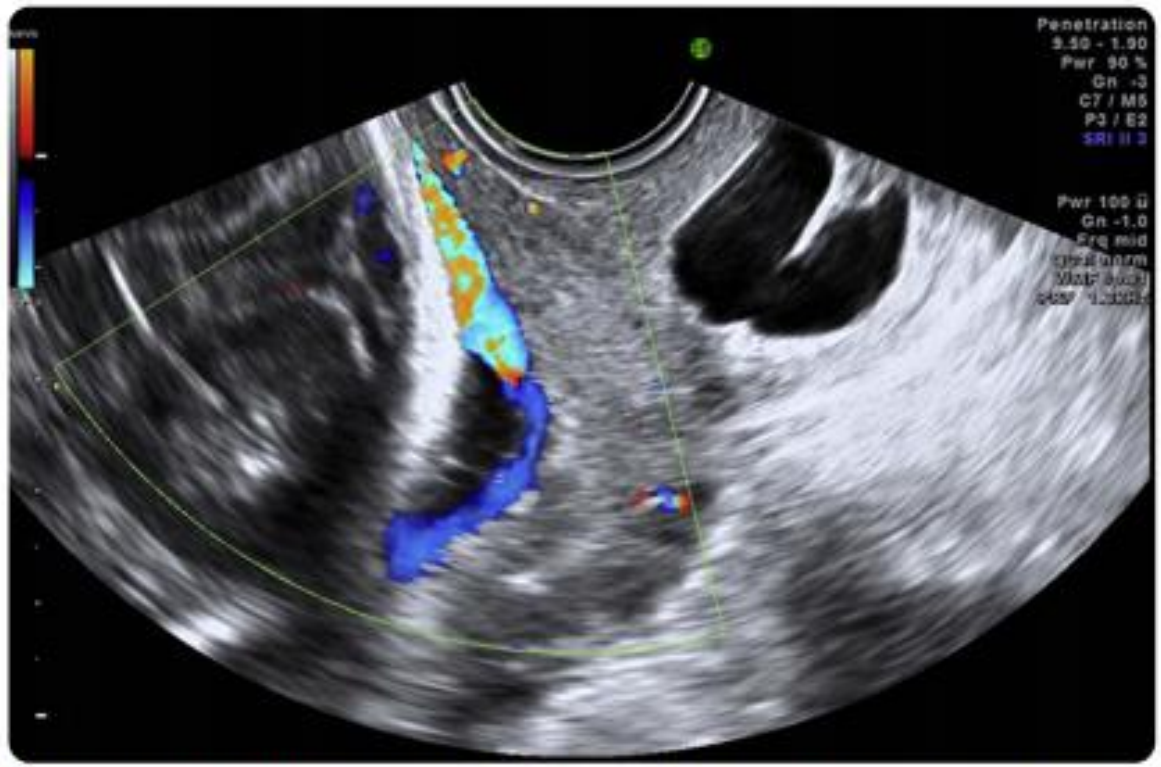
If placentation appears normal during a fetal anatomy ultrasound, the patient may resume routine care. If the placenta is a complete previa or is low-lying, a follow-up ultrasound is indicated to assess for vasa previa. If a vasa previa is suspected, a transvaginal ultrasound with pulsed wave Doppler may confirm the diagnosis.

SMFM. Diagnosis and management of vasa previa. Am J Obstet Gynecol 2015.

- Mid trisem → USG, lokasi plasenta
- Follow up USG pada minggu 32 → pada wanita dengan plasenta previa
- TVUSG dengan doppler dan warna jika curiga vasa previa
- DIAGNOSIS: posisi PD arteri janin divisualisasikan melewati atau dekat dengan os inter cervix, detak PD konsisten dengan FHR

FIGURE 2

Transvaginal ultrasound with color Doppler image of vasa previa



In this image obtained by transvaginal ultrasonography, a fetal blood vessel is seen traversing across the cervical os suggestive of a vasa previa.

SMFM. Diagnosis and management of vasa previa. Am J Obstet Gynecol 2015.

Tatalaksana dan Komplikasi

- Ketika dideteksi sebelum kelahiran, dilakukan delivery secara C-Section sebelum onset labour.
- Usia gestasional saat delivery belum ditentukan biasanya direkomendasikan 35-36 minggu namun tergantung dengan kasus pasien.
- Outcome: peningkatan <97% Ketika diagnosis dilakukan prenatal
- Admisi RS saat gestasi 30-32 minggu diikuti dengan administrasi kortikosteroid untuk maturitas paru-paru janins

- Komplikasi yang sering terjadi: rupturnya pembuluh yang mengalirkan darah janin → fetal anemia
- Komplikasi yang jarang terjadi; fetal hypoxia, karena kompresi pembuluh darah janin
- Diasosiasikan dengan mortalitas perinatal yang signifikan pada kasus yang tidak terdiagnosis

Referensi

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Terima Kasih