Chapter 18
Abnormalities of the Placenta and Umbilical Cord

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Objectives

- Discuss developmental variations in placental size, shape, and configuration.
- Identify the classifications of placenta previa.
- Explain the process of placental abruption and the associated risk factors.
- List placenta accreta types.
- Name the various abnormalities of umbilical cord insertion.
- Describe cystic and solid masses associated with the umbilical cord.

Abnormal Placental Size

- Thickness / volume increases with gestational age
  - 2-4 cm normal size
- Development of calcifications

Variations in Shape

- Succenturiate lobe
- Annular
- Placenta membranacea
- Placenta extrachorialis
- Circuvallate
PATHOLOGY BOX 18.2

Constitutions of Placental Invasion: The Placenta Acrita Spectrum

<table>
<thead>
<tr>
<th>Subtype</th>
<th>Description</th>
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<tbody>
<tr>
<td>Placenta acricta</td>
<td>Chorionic villi are attached to but do not invade the myometrium</td>
</tr>
<tr>
<td>Placenta accreta</td>
<td>Chorionic villi partially invade the myometrium</td>
</tr>
<tr>
<td>Placenta increta</td>
<td>Chorionic villi infiltrate up to or beyond the uterine serosa</td>
</tr>
</tbody>
</table>
**PATHOLOGY BOX 19-3**

**Differential Considerations for Intraplacental Sonoluent Lesions**

- Placental lakes
- Fibrin deposition
- Intravillous thrombosis
- Placental infarction
- Septal cysts
Gestational Trophoblastic Disease (GTD)

- Complete / partial mole
- Metastatic disease
- Choriocarcinoma
- Placenta mesenchymal dysplasia (PMD)
Umbilical Cord Anomalies

- Vessel number
- Persistent right umbilical vein (PRUV)
- Umbilical vein varix
- Body stalk anomaly / limb-body wall complex
- Insertion site
- Cysts / masses
- Position