

Placental Implantation Abnormalities



PLAY PICMONIC

Mechanism

Placenta Adheres Directly to Myometrium

Placenta-present sticks to Muscle-layer of uterus

Due to a defective decidual layer in the placenta, there is abnormal attachment and separation of the placenta to the myometrium.

Placenta Accreta

Placenta-present on A-crater

Placenta accreta is a term used to describe the placenta attaching to the myometrium without penetrating it. This is the most common form of placental implantation abnormality.

Placenta Increta

Placenta-present In-crater

Placenta increta is a term describing when the placenta penetrates into the myometrium, without passing through it.

Placenta Percreta

Placenta-present Pick-through-crater

Placenta percreta is a term used to describe placental attachment that perforates through the myometrium and into the uterine serosa. Serious complications of this can lead to the placenta invading the bladder wall or the rectum.

Caused by Scar Tissue

Caused by Scarface

These implantation abnormalities arise because of a defective or absent decidua, which is the epithelial lining in the endometrium. Scar tissue from a previous C-section or uterine procedure can lead to this absence of the decidua.

Hemorrhage

Hemorrhage-hammer

Due to abnormally deep penetration into the uterus (myometrium), there is massive post-partum hemorrhage which can be life-threatening to the mother.

Diagnosis

Ultrasound is First-line, then MRI

First-place Ultrasound soundwaves and M-R-eyes

Ultrasound is usually how abnormal placental implantation is first diagnosed. Once this is discovered, MRI is used to describe the depth of invasion.

Treatment



C-section Delivery

C-section

If a placental implantation disorder is discovered, patients are typically scheduled for C-section. This is done to circumvent post-partum hemorrhage which occurs through vaginal birth.

Artery Ligation or Embolization

Archery-artery Line-gate and Elmo-embolizing

Another treatment option is to ligate or embolize uterine arteries supplying hemorrhage from abnormal placental implantation. It is common to control bleed via embolizing or ligating a uterine artery.