Abnormally invasive placenta (AIP) antenatal referral pathway

Referral criteria to FMU for suspected abnormally invasive placenta

At any gestation
- Current CS scar pregnancy
- Previous uterine surgery (e.g.: myomectomy or endometrial ablation) with abnormal placenta
- Ultrasound suspicion of placenta accreta (e.g.: placental lacunae, loss of retroplacental clear zone, abnormal vascularity of subplacental zone, interruption/loss of bladder line)

At 24-32 weeks gestation
- Previous CS scar pregnancy
- Previous CS with low lying placenta (covering cervix or <2cm from internal os) or overlying old scar at routine 20 week anomaly ultrasound
- Previous classical CS with anterior placenta

FMU Review
- Ultrasound assessment and complete report for clinically significant placenta accreta
- Checklist for placenta accreta started if suspicion of placenta accreta is intermediate or above

Complete multidisciplinary checklist
- Counsel about diagnosis, delivery options and possible complications

Deliver locally
- if skilled team and hospital resources available
- If no signs of bladder wall involvement, and no signs of lateral/posterior wall invasion

Refer to Regional Accreta Group
- For decision regarding appropriate surgical approach, place and timing of delivery
- If signs of bladder wall involvement, diffuse accreta, lateral/posterior wall invasion
- If no skilled team and no hospital resources available
Abnormally invasive placental (AIP) is a spectral disorder ranging from a small discrete area of adherent placental tissue (focal accreta) to complete trophoblastic infiltration of myometrium, serosa and invasion of adjacent pelvic structures/organs (percreta).

AIP is a rare condition, affects 1/533-1/2510 deliveries but can be associated with life threatening haemorrhage during delivery.

Prompt antenatal diagnosis and management by a multidisciplinary team in tertiary institutions have been shown to reduce delivery complication rates.

Ultrasound is primary diagnostic modality; factors affecting accuracy include gestational age at assessment, operator experience and ultrasound criteria employed.

In at-risk women ultrasound signs for AIP should be sought early at the time of the anomaly scan and serial follow up scans from 28 weeks onwards should be arranged to predict extent of invasion and plan best surgical approach.

When planning delivery, knowledge of type and extent of placental invasion is essential. However, if there is doubt regarding invasion, then fetal MRI is a useful adjunct to help delineate the extent of placental invasion.

The optimal timing of delivery is not known, but delivery between 35 and 36 weeks may provide a good balance between fetal maturation and risk of sudden severe maternal bleeding. Earlier delivery may be considered if repeated vaginal bleeding occurs to avoid massive bleeding.

The best surgical approach is not known; but maternal complications associated with AIP are reduced when complex cases are managed and delivered by an experienced team including obstetricians, fetal medicine specialists, experienced pelvic surgeons, anaesthetists, neonatologist and interventional radiologist in tertiary institutions with adequate hospital resources.

In situations where AIP is discovered during caesarean section in a hemodynamically stable patient; and there is no skilled team and hospital resources available. The recommended approach is to perform a fundal caesarean delivery, cut and ligate the cord as close as possible to placental disc, do not attempt to remove placenta and close the uterus. Further management options include (a) leave placenta in situ until definitive reabsorption or (b) plan definitive surgery after delivery.