ABNORMAL LABOUR

DYSSTOCIA: ‘Difficulty in labour’

When there is poor progress OR the foetus shows signs of compromise OR malpresentation OR uterine scar OR labour is induced.

Poor Progress in 1st Stage

May be problems with:
- The PASSENGER – size, presentation, position.
- The PASSAGES – uterus, cervix, bony pelvis.
- The PROPULSION – uterine power, uterine efficiency.

Diagnosed when there is slow dilation of the cervix.

Phrases Relating to Poor Prognosis in 1st Stage Labour

Prolonged latent phase:
→ A failure of thinning of the lower segment, effacement and dilation of the cervix despite several hours of painful contractions.

Primary dysfunctional labour:
→ Most common in first labour.
→ Implies slow progress during the active phase of labour.
→ Usually assos. with inefficient uterine contractions.

Secondary arrest:
→ Implies appropriate progress of labour in the initial phase, but arrest of cervical dilation typically after 7cm.
→ Usually assoc. with malpresentation and cephalo-pelvic disproportion.

1. Inefficient uterine action:

Most common cause.

RF:
- Extremes of reproductive age.
- Primigravidae.
- Unusually anxious women.
- Uterine overdistension e.g. twins.

RF for abnormal labour:
- Small women
- Big baby
- Malpresentation
- Malposition
- Early membrane rupture
- Soft tissue/pelvic malformation
Inefficient uterine action is divided into one of two:

- Hypotonic inertia:
  - Contractions are weak and infrequent.
  - There is normal uterine tone between contractions.
  - Treatment: rupture of membranes ± iv oxytocin.

- Hypertonic inertia:
  - Contractions are irregular.
  - High resting basal tone between contractions.
  - Uterine circulation does not return to normal between in contractions → Foetal distress more likely.
  - Treatment: Epidural analgesia with iv oxytocin.

2. **Cephalo-pelvic disproportion (CPD)**

Implies anatomical disproportion between the foetal head and maternal pelvic.

**Cause:** large head, small pelvis, combination of the two OR relative CPD can occur with malposition of the head.

**RF:** primigravida women of small stature (<1.60m) with a large baby.

**CPD suspect in labour if:**
- Progress slow/stopped despite efficient uterine contractions.
- Foetal head not engaged.
- Vaginal examination shows severe moulding and caput formation.
- Head is poorly applied to the cervix.

**Treatment:** Oxytocin – for primigravida women – as long as no foetal distress.

3. **Abnormalities of passages:**

**Cause – abnormality of:**
- Bony pelvis.
- Maternal soft tissues.
- Uterus.
- Cervix.

**Causes – conditions:**
- Fibroids.
- Severe scarring of cervix from ops e.g.
  - LLETZ – scar tissue does not dilate.

**Treatment:**
- Normal delivery.
- C-Section.
**Delay in 2\textsuperscript{nd} Stage**

1. **Secondary uterine inertia:**
   - Having achieved full dilation the uterine contractions become weak and ineffectual ± maternal dehydration and ketosis.
   - **RF:** May be exacerbated by epidural analgesia.
   - **Treatment** (if no mechanical problem anticipated): Rehydration and iv Oxytocin.

2. **Persistent occipito-posterior position of the foetal head:**
   - **Treatment:** Head will have to undergo long rotation of occiput-anterior OR deliver in occiputo-posterior position i.e. face to pubes AND/OR iv Oxytocin.

3. **Narrow mid-pelvis:**
   - This prevents internal rotation of the foetal head – results in arrest of foetal head at level of the ischial spines in transverse position – condition called ‘Deep Transverse Arrest’.
   - **Treatment:** Delivery by rotational forceps (Kjelland’s) OR ventouse extraction OR C-Section.

**Management of Poor Progress in Labour**

- One-to-one care
- Early detection of poor progress
- Pain relief
- Oxytocin augmentation of abnormal labour

**Nulliparous woman:** If no foetal problems do early **artificial rupture of membranes** (ARM) – if still poor progress then give iv Oxytocin.

**Oxytocin:**
- Will make contractions more efficient AND/OR stronger + more frequent.
- **Do not** give if suspicion of foetal distress.
- Carries a **risk** of uterine rupture.
- Monitor with CTG throughout administration.
- Vaginal examination 2hrs post administration.

**Assessment of uterine contractions:** clinical examination and uterine tocography.

Major degree of **caput** and **moulding** suggests that there is a **mechanical obstruction**.

If **strong contractions but little progress** it suggests **CPD** – Treat with C-Section.
Women with a Uterine Scar

Usually due to C-Section due to risk of rupture of scar.

Likely to occur:
→ Late in 1st stage of labour.
→ Induced or accelerated labour.
→ Large baby.

Early signs of uterine rupture:
→ Severe lower abdo pain.
→ Cessation of contractions.
→ Signs of foetal distress.
→ Maternal tachycardia.

It is not advisable for a woman to labour if she:
→ Has two or more previous C-Section scars.
→ Has a high head at term.
→ Requires induction of labour.

Bibliography