PIPADOR REVISION

MRCOG Part 1 Revision Notes

Instrumental Delivery

CLINICAL MANAGEMENT • LECTURE 480

VISUAL EXAMINATION REVISION NOTES

2026 Edition

480

MRCOG PART 1 REVISION NOTES | CLINICAL MANAGEMENT

Instrumental Delivery

Assisted vaginal birth — definitions, indications, prerequisites, instruments, safety and aftercare (RCOG GTG 26)

≈ 10–15%	Fully dilated	3 pulls	Co-amoxiclav
UK births	Prerequisite	Then reassess / abandon	Single dose (ANODE)

■ KEY FACTS: Learning objectives

- Define assisted vaginal birth (AVB) and its classification by station and rotation.
- Describe indications, prerequisites, choice of instrument and safe conduct (RCOG GTG 26, 2020).
- Describe complications, aftercare and when to abandon or perform AVB in theatre.

480.1 Key definitions

Term	Definition
Assisted (operative) vaginal birth	Birth using forceps or vacuum (ventouse)
Outlet	• Fetal scalp visible without separating the labia • Head on the perineum • Rotation ≤ 45°
Low	• Leading point of skull at station ≥ +2 cm but not on the pelvic floor • Rotation ≤ 45° or > 45°
Mid	• Head 1/5 palpable abdominally • Leading point at or below the spines (0 to +2)
Rotational birth	Requires rotation > 45° (OP or OT positions)
Trial of assisted birth	Higher-risk AVB attempted in theatre with immediate CS available

■ IN PLAIN ENGLISH: Assisted vaginal birth

An instrument helps a baby that is already low in the pelvis to be born when the second stage has stopped progressing or the baby needs to be born quickly. Safety depends on **knowing the head position, not pulling too hard or too long, and knowing when to stop**.

480.2 Indications

Category	Examples
Fetal	Suspected fetal compromise (abnormal CTG/FBS)
Maternal	• Maternal exhaustion • Medical conditions where Valsalva/pushing should be avoided (cardiac disease, cerebral aneurysm, proliferative retinopathy)

Category	Examples
Inadequate progress	Delay in the active second stage (nulliparous 2 h, parous 1 h)

- Contraindications: head not engaged, unknown position, incomplete dilatation, suspected CPD
  - Ventouse contraindicated < 32 weeks (caution 32–36 weeks), face presentation
  - Caution with fetal bleeding disorders (vacuum).

480.3 Prerequisites and choice of instrument

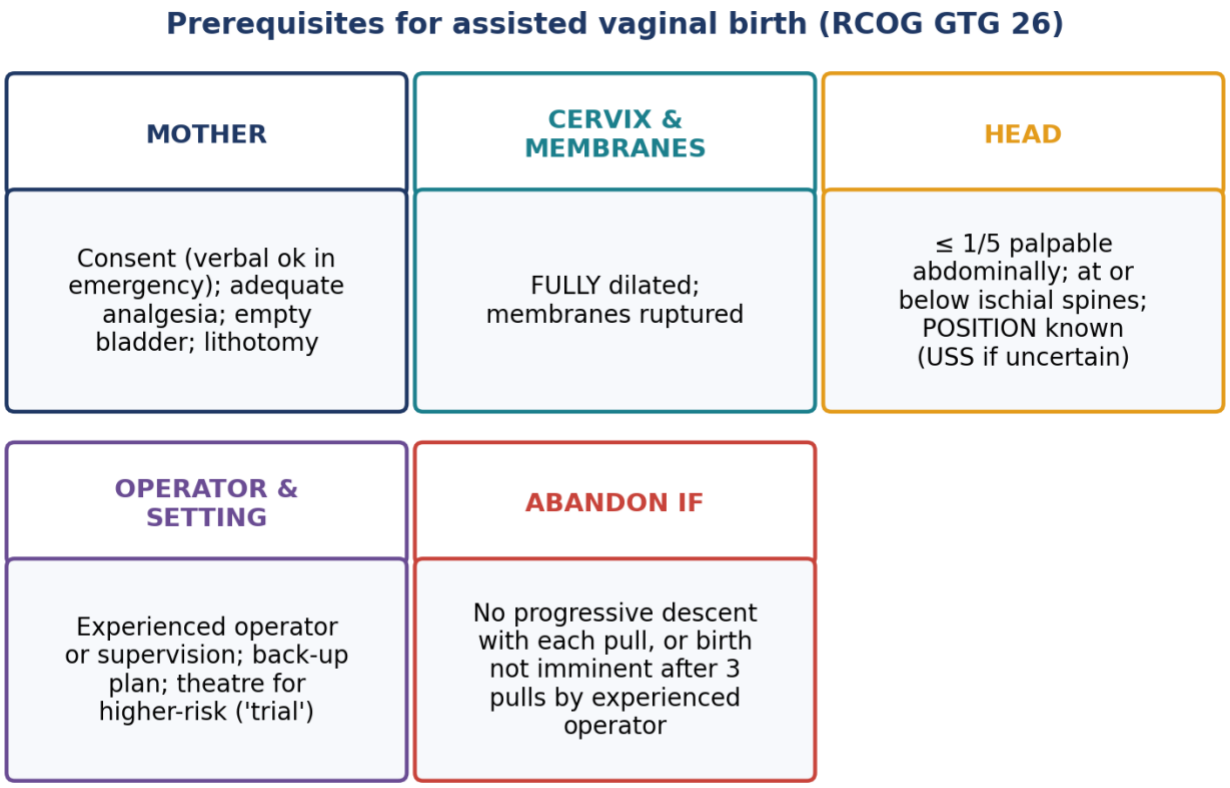


Figure 480.1 — Prerequisites for assisted vaginal birth

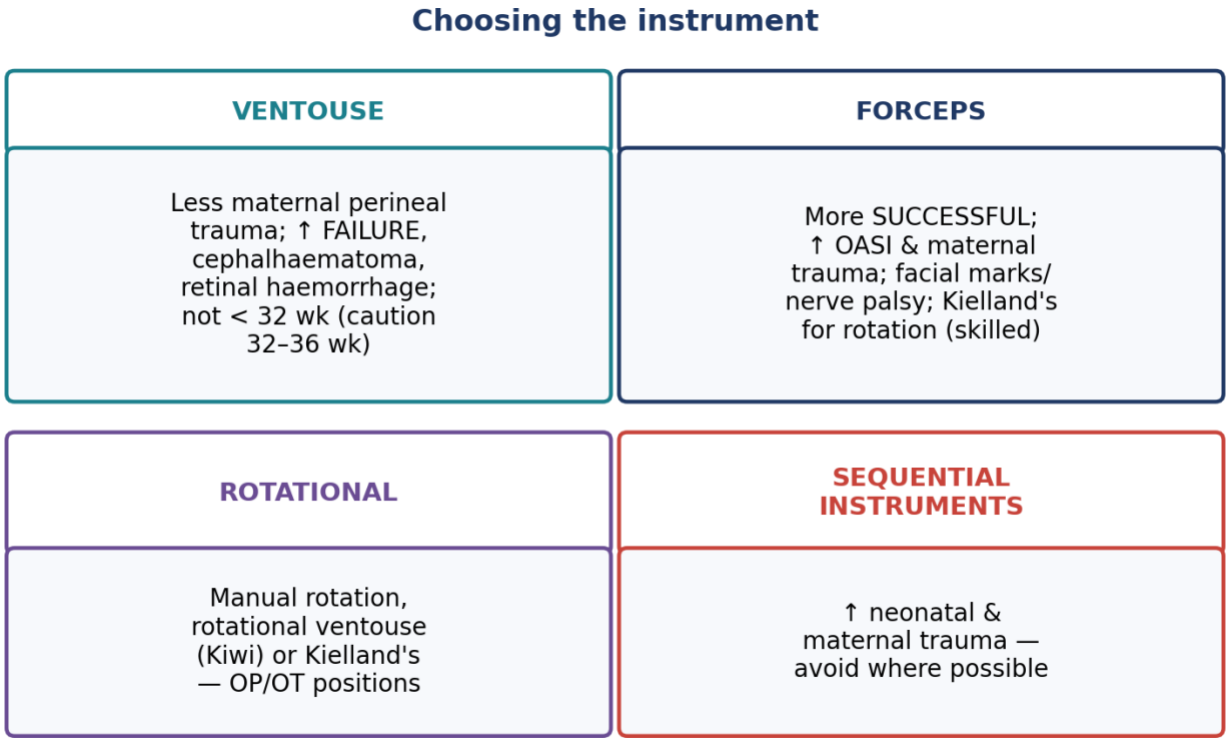


Figure 480.2 — Choosing the instrument

480.4 Conduct and safety

- Abdominal palpation and VE (position, station, caput, moulding); ultrasound if position uncertain.
- Mid-cavity and rotational births, or where difficulty anticipated (BMI > 30, EFW > 4 kg, OP position, head 1/5 palpable) → consider **trial in theatre**.
- Traction in line with the pelvic axis with contractions and maternal effort; expect descent with each pull.
- **Abandon** if no progressive descent with moderate traction, or if birth is not imminent after 3 pulls (with correctly applied instrument) by an experienced operator
  - Ventouse: ≤ 3 pulls to deliver head, stop after cup detachments.
- Avoid sequential instruments where possible (↑ neonatal injury); if used, document reasoning.
- **Mediolateral episiotomy** should be considered, especially for forceps and in nulliparous women.

480.5 Complications and aftercare

Maternal	Neonatal
Perineal tears/OASI (forceps > ventouse), PPH, urinary retention, infection, psychological trauma, pelvic floor dysfunction	• Cephalhaematoma, subgaleal haemorrhage (vacuum — monitor) • Retinal haemorrhage • Facial nerve palsy, skull fracture, scalp lacerations, jaundice

- **Prophylactic antibiotics**: single dose of IV co-amoxiclav after AVB (ANODE trial — halves maternal infection).
- Thromboprophylaxis risk assessment
  - Bladder care (catheter 12 h after regional anaesthesia)
  - Analgesia (paracetamol + NSAID)

- Debrief and documentation of indication, position, station, instrument, pulls, time and outcome
- Neonatal review for subgaleal haemorrhage.

■ **COMMON PITFALLS**

Attempting AVB without knowing fetal head position.

Persisting with traction without descent.

Forgetting antibiotics, bladder care or debrief.

480.6 Must-know summary

■ **EXAM TIP**

- Indications: fetal compromise, maternal exhaustion/contraindication to pushing, second-stage delay.
- Prerequisites: fully dilated, membranes ruptured, head ≤ 1/5 palpable, position known, analgesia, empty bladder, consent, skilled operator.
- Forceps more successful but more maternal trauma; ventouse more failures and cephalhaematoma; ventouse not < 32 weeks.
- Abandon if no descent or birth not imminent after 3 pulls; trial in theatre for higher risk; single dose co-amoxiclav after AVB.

■ **MNEMONIC / MEMORY AID**

Prerequisites — 'FORCEPS': Fully dilated, OA/OP position known, Ruptured membranes, Cervix gone, Empty bladder, Pain relief, Some consent.