Bwrdd Iechyd Prifysgol
Abertawe Bro Morgannwg
University Health Board

Operative Vaginal Delivery

Speciality:	Maternity
Approval Body:	Labour Ward Forum
Approval Date:	15th November 2018
Date of Review:	15th November 2021

Purpose and scope of the guideline:

This guideline provides an insight to the prerequisites, indications, choice of instruments and the postoperative care for the operators in instrumental delivery.

Background:

Operative delivery rates are in the region of 10%-15% (RCOG green top guideline 26). Risk of morbidity and mortality to both mother and baby is known while using either instrument. It has been recognised that the use of the appropriate instrument in the appropriate circumstances will achieve a successful instrumental delivery and reduce the morbidity and mortality to mother and baby.

Aims:

- To ensure the right procedure is followed in the right place by the right person
- To achieve safe outcome for the mother and baby with minimum interference
- To avoid unnecessary delay
- To avoid unnecessary interventions
- To avoid difficult assisted deliveries

Indications for operative vaginal delivery (RCOG green top guideline 26):

(No indication is absolute and each case should be considered individually)

1. Suspected fetal compromise
2. Conditions where there is a need to restrict maternal pushing and avoid Valsalva manoeuvre
3. Inadequate progress:

   Nulliparous: delay if inadequate progress after 2 hour of active second stage. Birth expected to take place within 3 hours of start of active second stage for nulliparous women.

   Parous: active second stage = 1 hour and birth expected to take place within 2 hours of start of active second stage for parous women.

   (NICE guidelines - NICE intrapartum care)
4. Maternal fatigue / exhaustion

Operative vaginal births should be conducted in the operating theatre where:-

- **Difficult vaginal delivery is anticipated**
- **Delay in transferring to theatre after a failed instrumental delivery could lead to significant fetal compromise**

Contraindications for operative vaginal delivery: (RCOG green top guidelines 26)

- fetal head position unsure – senior input necessary
- fetal head above ischial spines
- before full dilatation of cervix

Relative contraindications (check antenatal care plan and discuss with Consultant)

- Fetal bleeding disorders such as alloimmune thrombocytopenia
- Fetal predisposition to fractures (e.g. osteogenesis imperfecta)
- Ventouse delivery before full dilation

Contraindications for Ventouse Delivery

- Face presentation
- Gestations of less than 36 weeks

Pre-requisites for operative vaginal delivery (adapted from SOGC, 2004 RANZOG 2002)

Preparation	Essential
Full abdominal and vaginal examination	Head is ≤ 1/5 palpable per abdomen Vertex presentation Cervix is fully dilated and the membranes ruptured Position of the head can be determined so proper placement of the instrument can be achieved Pelvis is deemed adequate
Mother	Informed consent must be obtained and clear explanation given. Written consent if for trial of instrumental deliveries in theatre. Appropriate analgesia A pudendal block may be appropriate, particularly in the context of urgent delivery Maternal bladder has been emptied recently Indwelling catheter should be removed or balloon deflated Aseptic techniques
Staff	Operator must have the necessary knowledge, experience and skills to use the instruments Back-up plan in place in case of failure to deliver and adequate facilities and back-up personnel are available Anticipation of complications that may arise (e.g. shoulder dystocia, PPH) Neonatal team to be present Anaesthetist and theatre team to be aware. Consultant present if operator is not signed off for independent practice.

Anaesthesia

- Consider pudendal block with perineal infiltration with 1% lignocaine, particularly for forceps delivery.
- If epidural anaesthesia insitu – inform anaesthetist to check sacral block is adequate prior to the procedure.
- For trial of instrumental delivery in theatre +/- Caesarean section - anaesthesia should be adequate for caesarean section or the woman must agree to proceed to a general anaesthetic if the trial fails.

Delivery

- Aim for delivery in 3 pulls
- Abandon instrumental delivery if there is no evidence of progress with each pull
- If delivery is not imminent following 3 pulls of correctly applied instrument by experienced operator fetal well being and fetal position is to be reassessed if aiming to continue with instrumental delivery
- Ventouse cup is to be reapplied after proper reassessment
- Unsuccessful instrumental delivery should trigger an incident form as a part of effective risk management process.

Choice of instrument

The operator should choose the instrument most appropriate to the circumstances and their level of skill.

Options of rotational delivery include rotational instrumental delivery with Kiellands forceps, Ventouse or manual rotation with direct traction forceps.

Sequential use of instruments

The sequential use of instruments is associated with increased risk of injury to the fetus and will need senior input.

The risk of using a forceps for delivery after failed ventouse delivery should be weighed against the risks of delivery by caesarean section.

If the second instrument is used document the reasons for second instrument.

Post operative

- Repair of perineum
- Adequate analgesia with regular Paracetamol and Diclofenac unless contraindicated.
- Documentation of the procedure
- Paired cord samples should be taken and documented.
- Need for thromboprophylaxis considered.
- Timing of first void urine should be monitored
- Fluid balance should be monitored for first 24 hours to detect postpartum urinary retention.
- Obstetrician should review the women prior to discharge and discuss the indication for operative delivery, management of any complications and prognosis for future deliveries.
- Pelvic floor exercise should be encouraged and written information provided
- There is no evidence for the routine use of antibiotics in instrumental deliveries.

References:

Operative delivery RCOG green Top guideline 26.
Intrapartum care NICE guideline.

Operative Vaginal Delivery Sheet

Date: _____ Time: _____

Parity: _____ Gestational Age: _____

BMI: _____

Labour: Spontaneous onset / IOL / Augmented

Name and addressograph

Indications: _____

Location: Room / Theatre

Operator's name: _____ Grade: _____

Senior doctor involved in decision making: Yes / No Name: _____ Grade: _____

Senior Doctor present for delivery: Yes / No Name: _____ Grade: _____

Anaesthetist present: Yes / No Name: _____ Grade: _____

Analgesia / Anaesthesia: Epidural top up / Spinal / GA / Pudendal / Local: _____

Examination Findings:

PA: ____ /5 palpable	Cervical dilatation: _____cm
Station:	Fetal position:
Caput: none / + / ++ / +++	Moulding: none / + / ++ / +++
Bladder catheterised: Yes / No	

Type of delivery

Manual rotation: Yes / No

Ventouse: Posterior metal cup / Kiwi / Other _____

Number of pulls: _____ Duration of Cup application: _____mins

Cup detachment: Yes / No; If Yes; number of times: _____

Forceps: Traction / Lift out / Rotational : _____

Number of pulls: _____ Duration of forceps application: _____mins

Second instrument used: Yes / No

If Yes; which instrument: _____Number of pulls: _____

If CS, failure of instrumental to delivery time: _____

Initial decision to delivery time: _____

Any difficulty in delivering shoulders - No / Yes

If yes, please give details _____

_____

Time of delivery of baby: _____ **Time of cord clamping:** _____

If cord clamped at < 60 sec, please give indication: _____

Delivery of placenta: CCT / Manual

Perineal tear - 1º / 2º / 3º / 4º Labial tear: Y / N Episiotomy: Y / N

Repair: Vagina _____ Muscle _____ Skin_____

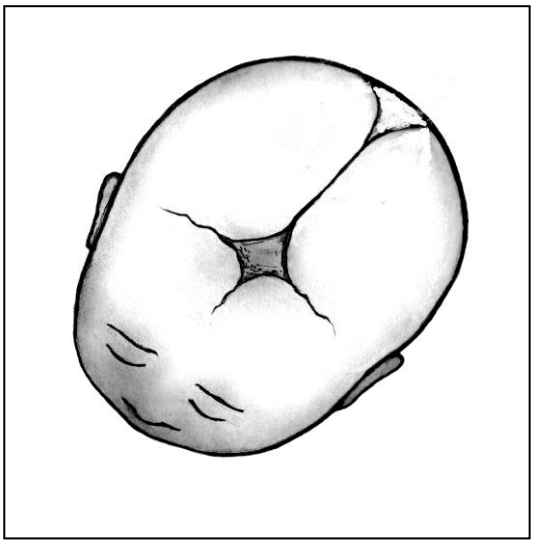
PV: _____ PR: _____ Estimated Blood loss: _____ mls.

End of procedure swabs needles and instrument check:

Swabs: _____ Needles: _____ Instruments: _____

Signatures 1 _____

2 _____



forceps marks etc. on diagram

Condition of baby

Cord blood:	Arterial	Venous
pH:	_____	_____
BE:	_____	_____

Apgars: ___[1]; ___[5]; ___[10]; Birth weight: _____

Admission to NNU: Yes / No

Trauma:

scalp abrasion / forceps mark/ facial abrasion / cuts /other

_____

Additional information:

Post- op instructions:

Thrombo-prophylaxis: **Post Natal Risk Assessment completed: Yes / No**

TEDS / LMWH for _____ days

Signature:	**Print name:**

Maternity Services

Checklist for Clinical Guidelines being Submitted for Approval

Title of Guideline:	Operative Vaginal Delivery
Name(s) of Author:	Sanjay Curpad
Chair of Group or Committee approving submission:	Labour Ward Forum
Brief outline giving reasons for document being submitted for ratification	Update existing policy
Details of persons included in consultation process:	Labour Ward Forum membership
Name of Pharmacist (mandatory if drugs involved):	n/a
Issue / Version No:	5
Please list any policies/guidelines this document will supercede:	Operative Vaginal Delivery, 2015
Date approved by Group:	15th November 2018
Next Review / Guideline Expiry:	15th November 2021
Please indicate key words you wish to be linked to document	Instrumental, operative, forceps, ventouse
File Name: Used to locate where file is stores on hard drive	Z:\npt_fs2\Maternity Incidents Stats Etc\Policies\Ratified - Obs