

# SHOULDER DYSTOCIA

## CLINICAL GUIDELINE MCSA.MBC.2.1

### Definition

Vaginal cephalic delivery that requires additional obstetric manoeuvres to deliver the fetus after the head has delivered and gentle traction has failed to deliver the body, leading to a head-to-body delivery time of more than 60 seconds

### SIGNS OF SHOULDER DYSTOCIA

1. Retraction of the delivered fetal head against the maternal perineum (turtle sign)
2. Inability to deliver the fetal shoulders with routine retraction in the axial direction

### Recognise risk factors and be prepared:

#### Pre labour Risk factors

- Previous shoulder dystocia
- Macrosomia > 4,5kg
- Prior macrosomic child
- Diabetes mellitus (especially if Estimated Fetal weight is  $\geq 4\text{kg}$ )
- Maternal BMI  $\geq 30\text{kg/m}^2$
- Excessive weight gain
- Multiparity
- Post-term gestation

#### Intrapartum risk factors

- Prolonged first stage labour
- Secondary arrest
- Prolonged second stage
- Induction of labour
- Oxytocin augmentation
- Assisted vaginal delivery
- Epidural

Planned caesarean section should be considered when estimated fetal weight > 5000g in nondiabetics and >4000g for diabetics

## Management

1. Call for help.
  - a. Midwife (most senior on floor), extra midwife, obstetrician, neonatal team.
2. Appoint a nurse to take notes and time the proceedings (e.g., timing of head to shoulders delivery etc.)
3. Explain to the patient that the fetal body is trapped in the pelvis and that you need her co-operation
4. McRobert's Manoeuvre
  - a. Patient should lay flat, move buttocks to the end of the bed.
  - b. Push thighs to abdomen (hyperflex the hips)
  - c. Get an assistant to provide sustained strong supra-pubic pressure in the direction of the fetal face while the primary operator performs routine axial traction on the fetal head.
  - d. NB! Discourage patient from bearing down until the anterior shoulder is released
  - e. NB! Do not give fundal pressure
5. Consider episiotomy to make internal manoeuvres easier (not compulsory)
6. Depending on operator experience try either of next 2 steps first
  - a. Attempt delivery of the posterior arm
  - b. Internal rotational manoeuvres (posterior sling traction – foley's catheter, Wood's or Rubin's)
7. If still impacted shoulders, try "all fours position" (if patient has not had an epidural), or repeat previous manoeuvres.
8. Clavicular fracture, Zavanelli, or symphysiotomy as last resort

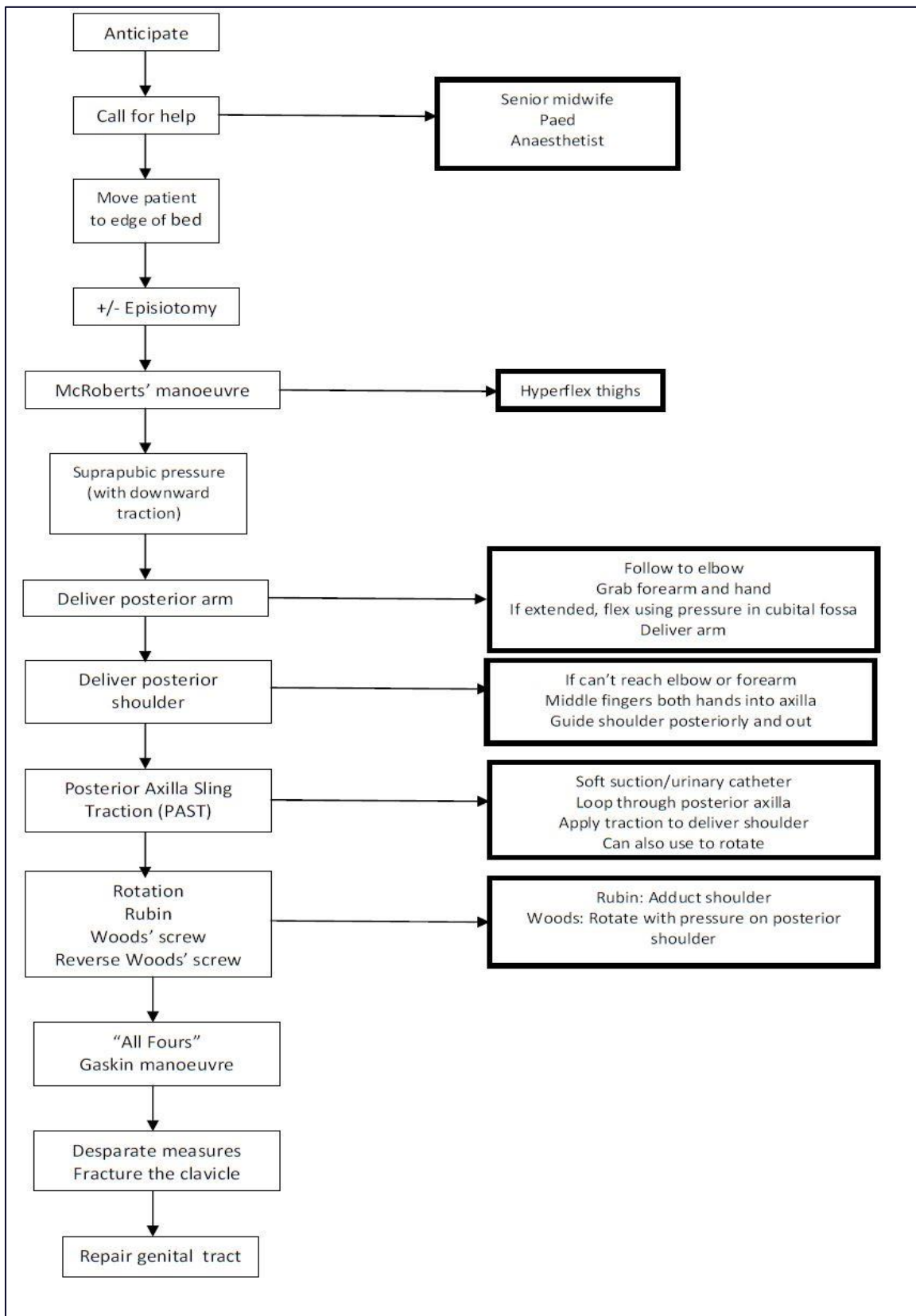
## Postpartum care

- Routine administration of Oxytocin 10U IMI stat and active management of third stage of labour
- Watch out for and prevent postpartum haemorrhage. (Keep bladder empty, rub up uterus, pad checks, oxytocin infusion 20U in 1 litre of saline @ 100ml/h.)
- Take cord blood for pH and acid – base analyses post-partum.
- Routine post-delivery observations.
- Examine patient for vaginal and perineal tears closely and repair where necessary.
- Debrief parents.
- Baby MUST be seen by paediatrician and evaluated for brachial plexus injuries, fractures (clavicle and humerus), HIE. etc.
- Write clear notes, note which shoulder was trapped, which steps were taken

## Management of next pregnancy

- Screen for Diabetes Mellitus between 24 – 28w gestation with an Oral Glucose Tolerance Test (OGTT).
- Counsel patient:
  - Risk for recurrent shoulder dystocia but the most important risk factor remains fetal weight.
  - You may offer abdominal delivery, especially with a big baby.
  - Counsel on prevention of maternal obesity, diabetes and excessive weight gain in pregnancy.

## Management of Shoulder Dystocia



## Authorship

These guidelines were drafted by a clinical team from Mediclinic and were reviewed by a panel of experts from SASOG and the BetterObs™ clinical team in 2019 and revised by the scientific committee of BetterObs™ in 2023. All attempts were made to ensure that the guidance provided is clinically safe, locally relevant and in line with current global and South African best practise. Succinctness was considered more important than comprehensiveness.

All guidelines must be used in conjunction with clinical evaluation and judgement; care must be individualised when appropriate. The writing team, reviewers and SASOG do not accept accountability for any untoward clinical, financial or other outcome related to the use of these documents. Comments are welcome and will be used at the time of next review.

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## History and version control

Author	Version	Details of update	Effective date
Cape Gate Obstetrician Working Group	1	Initial Release	2017 10 01
External Expert Obstetrician	1.1	Validated	2017 01 01
A. Hall	1.2	Rebranded to Mediclinic Clinical Guideline, edited and drugs changed to active ingredients	2019 12 01
SASOG Scientific committee Dr C Groenewald		Comment about cut-off weight for Diabetic to be 4kg accepted and change made McRobert's Manoeuvre added warning to discourage patient to bear down Deleted the following statement: If above manoeuvres fail, consider repeating prior steps Flow diagram for the Management of Shoulder Dystocia was changed	2023 01 12

## Approval and Sign off

Department/ Area/ Group/ Forum	Representative name	Signature	Designation	Date
Clinical Department	Dr Gerrit De Villiers		Chief Clinical Officer	2023 04 25