Clinical Practice Guidelines:
Obstetrics/Shoulder dystocia

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Date
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Purpose
To ensure consistent management of Shoulder dystocia.

Scope
Applies to all QAS clinical staff.

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Information security
This document has been security classified using the Queensland Government Information Security Classification Framework (QGISCF) as UNCLASSIFIED and will be managed according to the requirements of the QGISF.

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**Shoulder dystocia**

In **shoulder dystocia**, disproportion occurs between the bisacromial diameter of the foetus and the antero-posterior diameter of the pelvic inlet, resulting in impaction of the anterior shoulder of the foetus behind the symphysis pubis.\[1\] Difficult delivery ensues, requiring the use of additional manoeuvres beyond the downward traction of the foetal head. It is relatively uncommon, occurring in 1 in 300 births.

**Shoulder dystocia – woods screw manoeuvre**

Shoulder dystocia is associated with serious complications for both the mother and baby.\[1\] Perinatal morbidity includes asphyxia, birth trauma such as brachial plexus injury and fractured clavicles, and permanent neurological damage. Foetal death can also occur if not recognised immediately and treated promptly.\[2\]

**Clinical features**

Shoulder dystocia usually becomes obvious after the foetal head emerges and retracts up against the perineum, failing to undergo external rotation (**turtle sign**).\[3\]

Shoulder dystocia is confirmed when the standard delivery manoeuvres (traction in a lengthwise trajectory) fail to deliver the foetus and the head to body delivery interval is prolonged $\geq$ 60 seconds.\[4\]

**Risk assessment**

An increased risk of shoulder dystocia is reported in association with:

- prolonged second stage of labour
- assisted delivery
- maternal diabetes with or without macrosomia
- previous shoulder dystocia
- a large foetus $\geq$ 4.5 kg (macrosomia)
- history of a large foetus
- maternal obesity
- multiparity.

Any combination of the above factors may significantly increase the risk of shoulder dystocia.\[5\]
Additional information

*External manoeuvres include the following:*
- McRoberts manoeuvre
- Rubin I manoeuvre (supra pubic pressure)
- Rotation onto all fours
Internal manoeuvres: manipulation of the foetus within the birth canal includes:

- Rubin II manoeuvre
- Woods Screw manoeuvre
- Reverse woods screw manoeuvre
- Deliver of posterior arm

**NOTE:** Paramedics must exhaust all external manoeuvres first before undertaking the manipulation of the foetus within the birth canal. A description of each of these techniques is given in CPP: Shoulder dystocia. Always consider appropriate pain relief as required.
CPG: Paramedic Safety
CPG: Standard Cares

Recognise shoulder dystocia
- Turtle sign foetal shoulder fail to deliver because anterior shoulder is stuck behind maternal symphysis pubis
- Failure to deliver head to body delivery interval is > 60 seconds.

Maternal Position:
- ask mother to lie flat, then assist to move into running start position, then alternate to all fours.

Consider:
- need for back up
- prepare for newly born resuscitation
- urgency
  - start time when shoulder dystocia is recognised
  - aim to birth baby within 4 minutes
- pain relief
- external manouevres BEFORE attempting internal manouevres
- contractions may stop, synchronise with interventions if still occurring

External Manoeuvres: maintain urgency when carrying out manouevres
- McRoberts manouevres (bring her knees up towards her chest, thighs to abdomen)
  - if shoulders do not release after 30 seconds move to next step
- Rubin’s I manoeuvre, (Suprapubic pressure applied in downwards and in lateral direction)
  - if shoulders do not release after 30 seconds move to next step
- All fours position (move mother onto “all fours”, encourage mother to push to release shoulders)
  - if shoulders do not release after 30 seconds move to next step

Assess immediately post-delivery is the neonate breathing or crying with good muscle tone and HR > 100

Conduct post-delivery assessment and cares:
- dry baby
- maintain warmth
- provide maternal and neonate skin to skin contact
- clamp and cut the cord, whenstop pulsating
- APGAR score at 1 & 5 min
- encourage breastfeeding

Manager as per:
CPP: Resuscitation newly born
- need for back up
- prepare for newly born resuscitation
- urgency
- pain relief
- external manouevres

Consider:
- gaining consent
- timing
- do not spend too long on each manoeuvre
- code one transport to obstetrics unit

Transport to hospital
Pre-notify as appropriate

Note: Officers are only to perform procedures for which they have received specific training and authorisation by the QAS

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