



Clinical Practice Guidelines: Obstetrics/Shoulder dystocia

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Scope	Applies to all QAS clinical staff.
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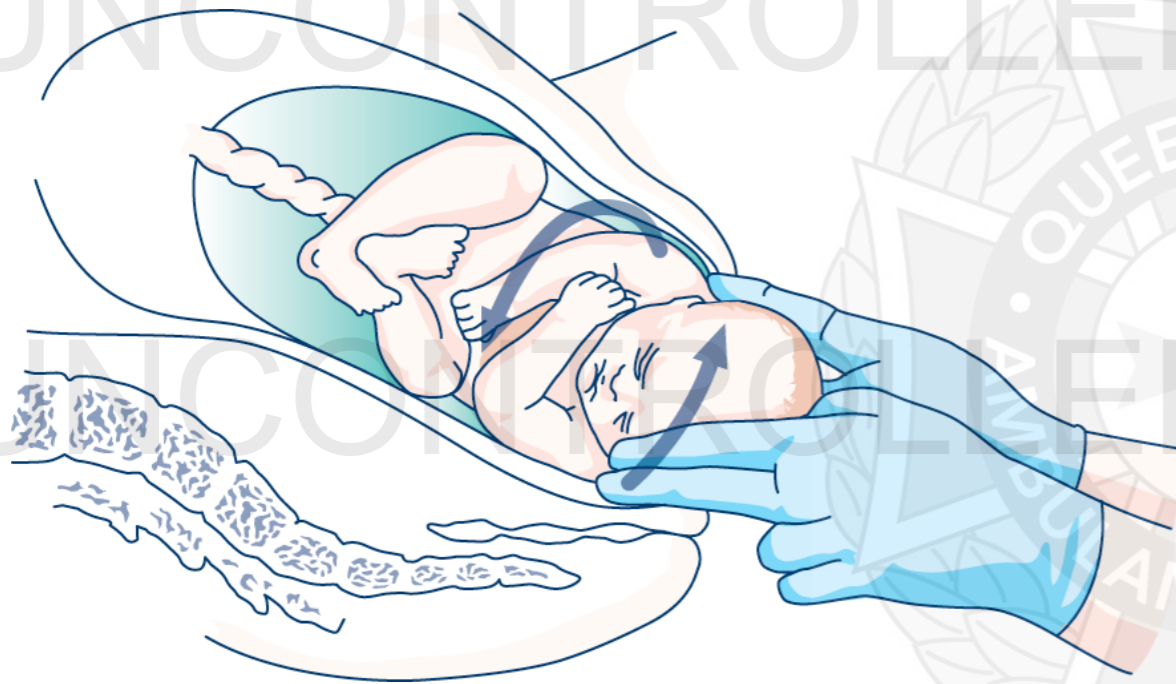


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In **shoulder dystocia**, disproportion occurs between the bisacromial diameter of the foetus and the antero-posterior diameter of the pelvic inlet, resulting in impaction of the anterior shoulder of the foetus behind the symphysis pubis.^[1] Difficult 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 ≥ 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 > 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]

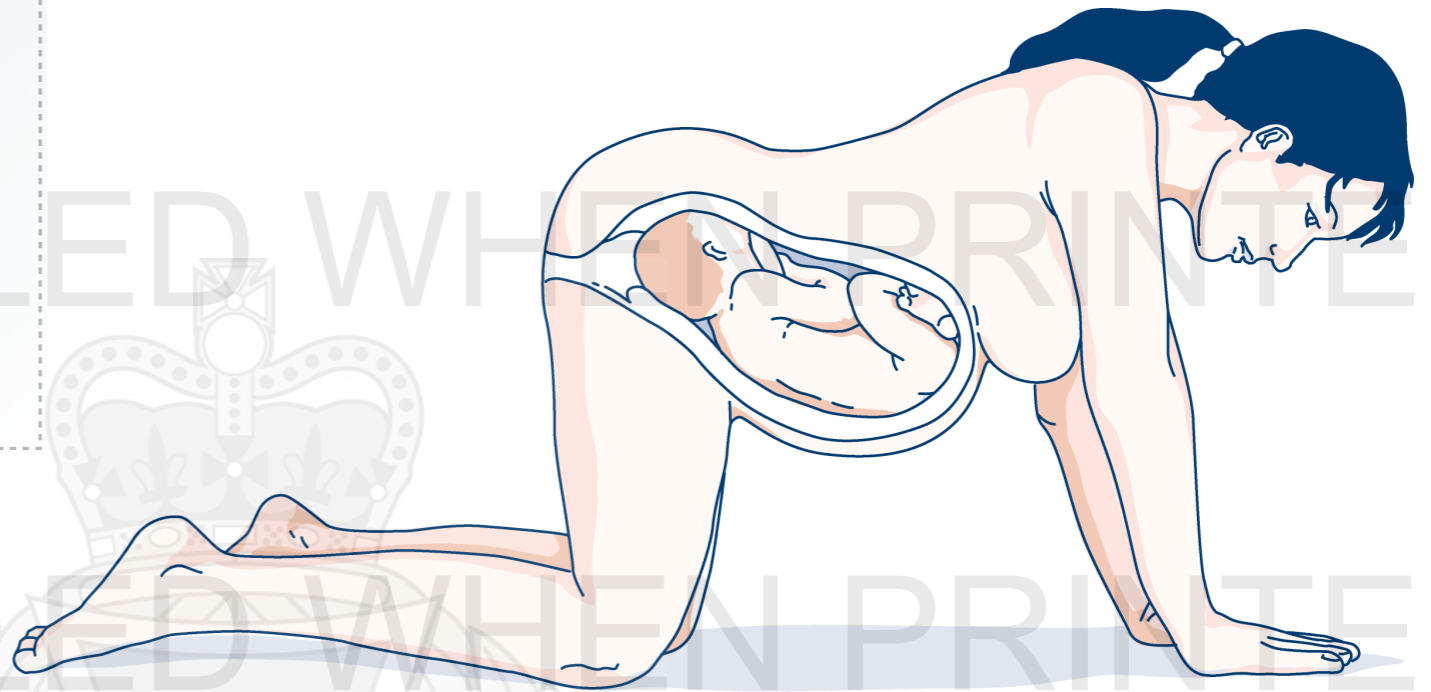


Additional information

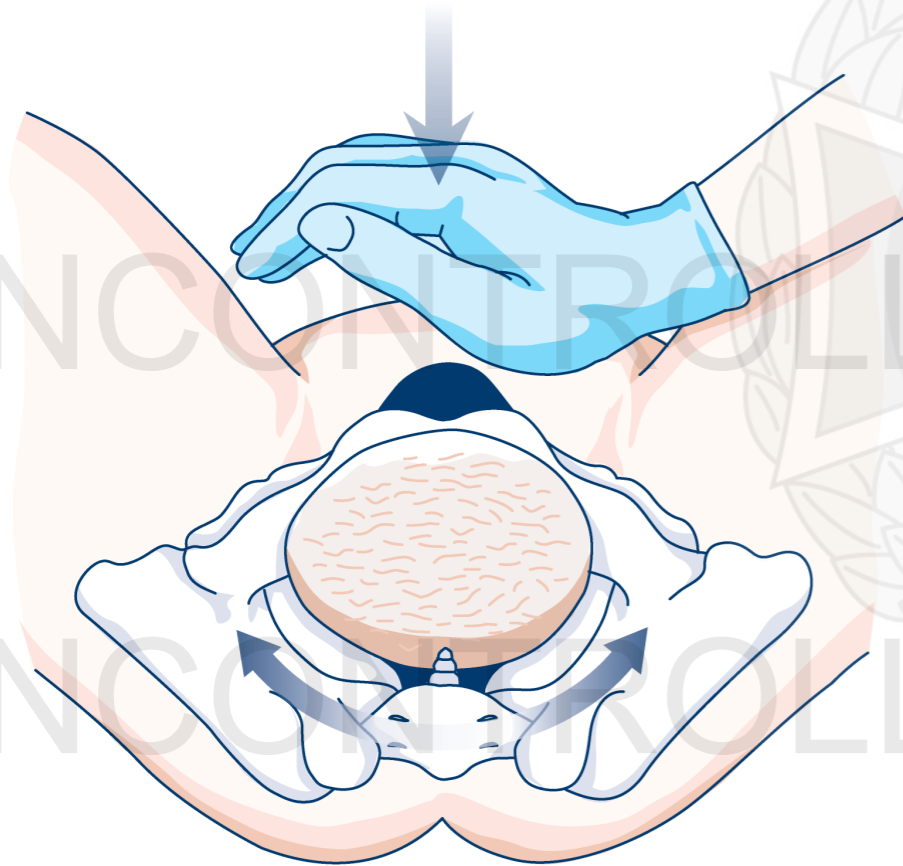
External manoeuvres include the following:

- McRoberts manoeuvre
- Rubin I manoeuvre (supra pubic pressure)
- Rotation onto all fours

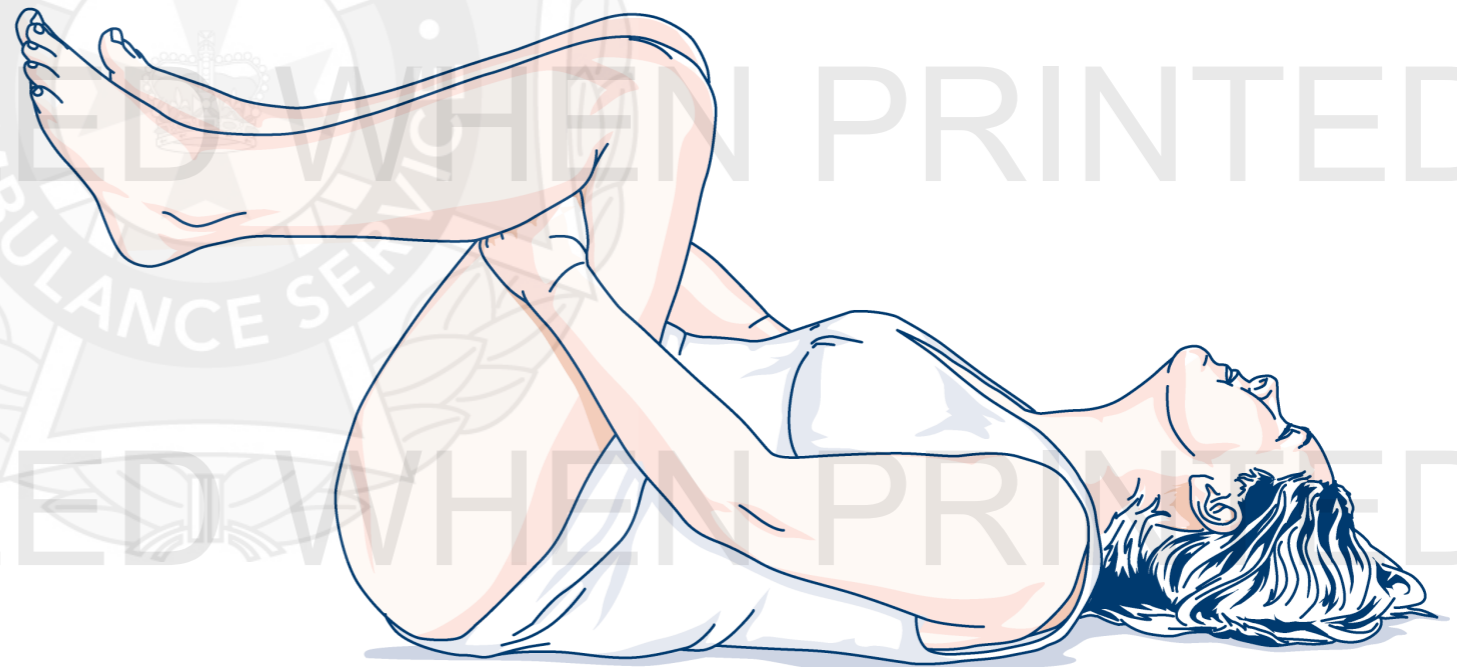
Apply downward pressure
just superior to the symphysis pubis
in a continuous or rocking motion



Rotation to all fours



Rubin I manoeuvre (supra pubic pressure)

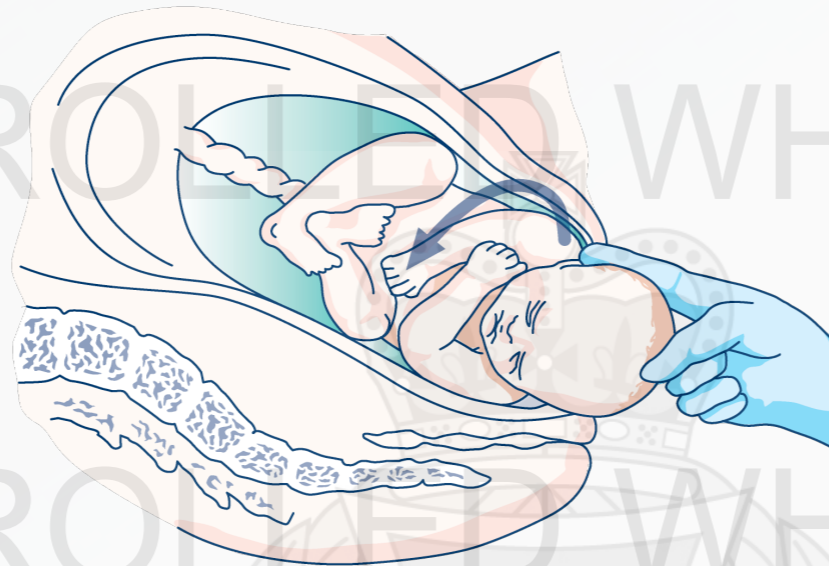


McRoberts manoeuvre

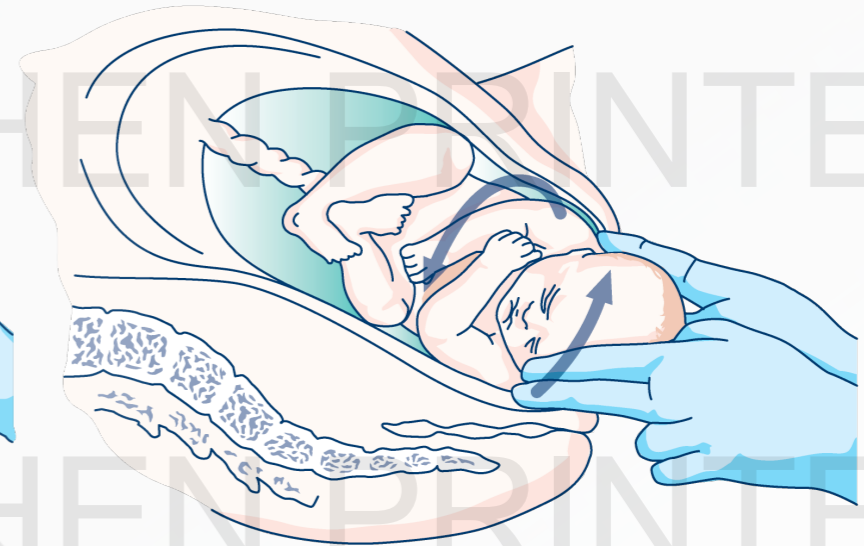
+ Additional information (cont.)

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

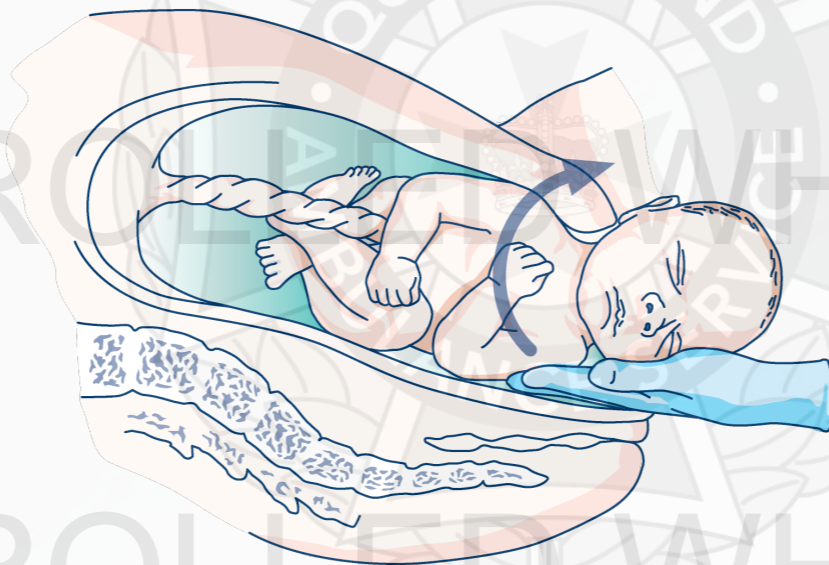


Rubin II manoeuvre

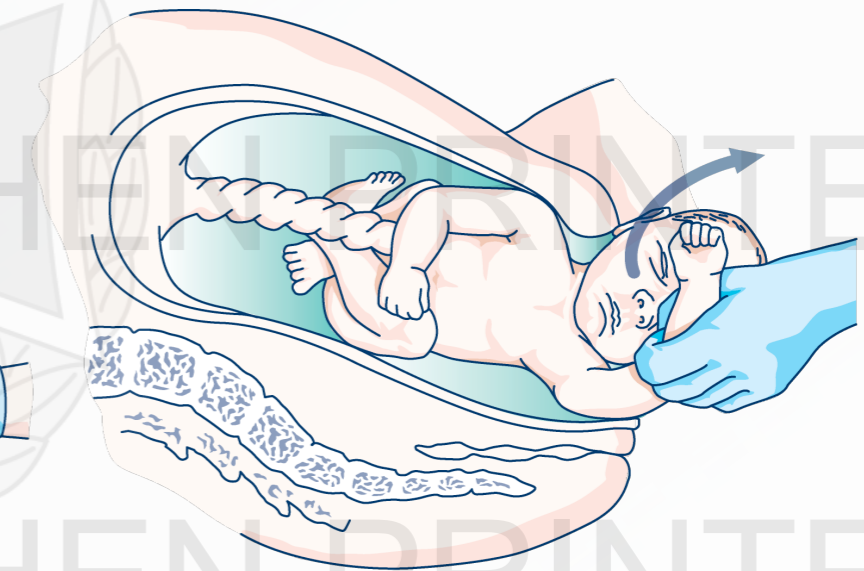


Woods screw manoeuvre

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.



Reverse woods screw manoeuvre



Delivery of posterior arm

Recognise shoulder dystocia

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

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

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 manoeuvres **BEFORE** attempting internal manoeuvres
- contractions may stop, synchronise with interventions if still occurring

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.

External Manoeuvres: maintain urgency when carrying out manoeuvres

- McRoberts manoeuvres (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

Successful?

Y

N

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, when stops pulsating
- APGAR score at 1 & 5 min
- encourage breastfeeding

Internal manoeuvres

- Rubin II (using fingers apply pressure behind the anterior shoulder, pushing the shoulder towards the baby's chest)
- do not pull downwards or twist foetal neck at any time
- woods screw
- reverse woods screw
- delivery of posterior arm

Consider:

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

Manager as per:

CPP: Resuscitation newly born

**Transport to hospital
Pre-notify as appropriate**