NHS
Frimley Health
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Shoulder dystocia

Prompt/Skills Drills

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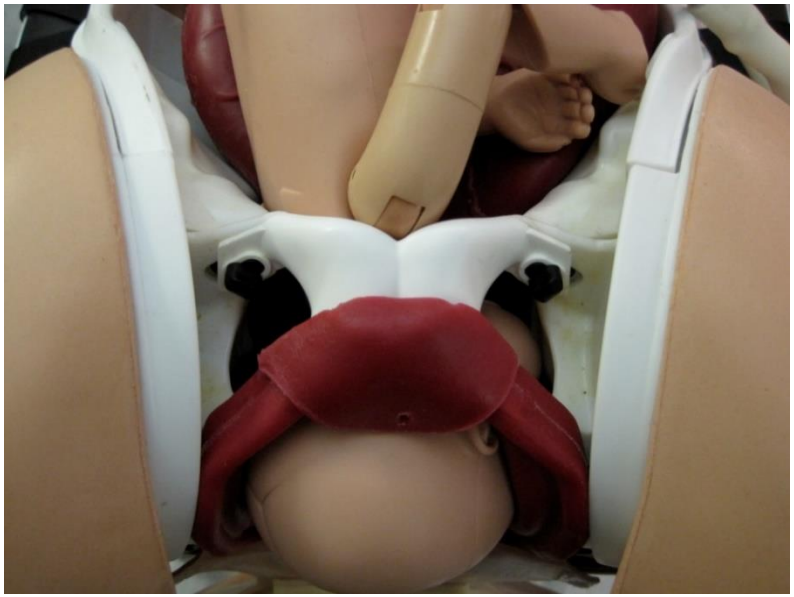
PRactical Obstetric Multi-professional Training®

Aims of Session

- Understand what shoulder dystocia is
- Identify the risk factors associated with shoulder dystocia
- How to manage a shoulder dystocia in a timely way
- What not to do in a shoulder dystocia
- What to do after a shoulder dystocia

What is shoulder dystocia? (RCOG 2012, HSIB 2021)

- Where additional maneuvers are required to complete the birth of the baby, after routine axial traction has failed to release the shoulders
- Affects 0.58% - 0.70% of all births
- Commonly the uppermost shoulder of the baby impacts behind maternal pubic bone
- Time-critical obstetric emergency, that can result in HIE, brachial plexus injury or death
- Increased risk of bleeding to mother and perinal trauma



What are the risk factors? (RCOG 2012)

- Previous shoulder dystocia (rates between 12% and 17%)
- Large for Gestational Age-EFW above 4.5 kgs
- Maternal diabetes mellitus & GDM
- Maternal BMI above 30 kg/m2
- Induction of labour
- Prolonged first and second stage of labour
- Labour augmentation
- Operative vaginal birth

Can we predict shoulder dystocia ?

NO!

- Majority of cases of shoulder dystocia occur in women without any risk factors
- It is **unpredictable** and **unpreventable**
- It can occur with **ANY BIRTH**

Birthweight of babies in HSIB investigations reporting shoulder dystocia-HSIB Feb 2021

Birthweight	Less than 4,000g	4,001g to 4,500g	4,501g to 5,000g	Greater than 5,001g
Number of babies	9 (29%)	14 (45%)	3 (10%)	5 (16%)

How do you recognize shoulder dystocia ?

- Slow & difficult delivery of fetal face and chin
- When fetal head is delivered, it remains tightly applied to the vulva
- Chin retraction known as“turtle neck”
- Anterior shoulder fails to deliver with ‘routine’ traction

How do you manage shoulder dystocia ?

CALL FOR HELP

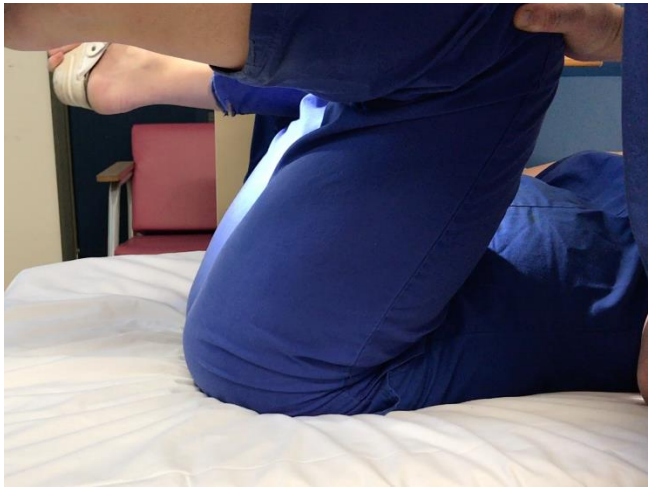
- Clearly state problem:
  - Experienced midwives
  - Experienced Obstetrician
  - Health care assistants
  - Neonatologist
  - Anaesthetist & theatre team on stand-by

Managing Shoulder Dystocia

- Current international guidelines all recommend the use of four basic resolution manoeuvres:
  - McRoberts' / All-fours McRoberts'
  - Supra-pubic pressure
  - Delivery of the posterior arm
  - Internal rotation of the shoulders

McRoberts position

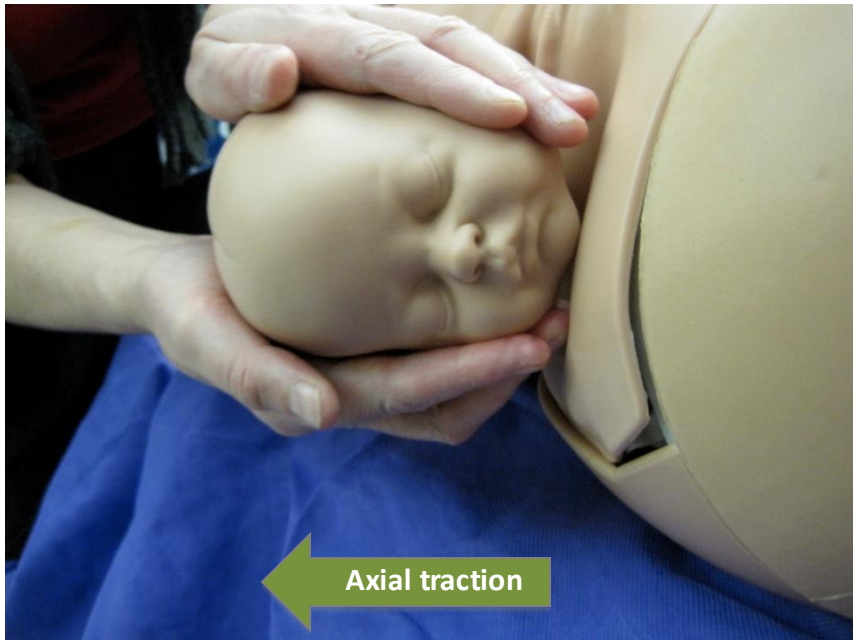
- Lie mother flat, removing any pillows
- Hyperflex & support mother's legs (knees towards chest)
- Mother's bottom lifted off the bed
- Increases relative AP diameter of pelvic inlet by making pelvis more upright
- Apply routine 'axial' traction to fetal head to assess if manoeuvre has been successful



Routine axial traction

- The same degree of traction as applied during a normal birth in an axial direction:

- Traction applied in line with the axis of the fetal spine
- Routine axial traction ONLY applied to assess whether each manoeuvre has been successful

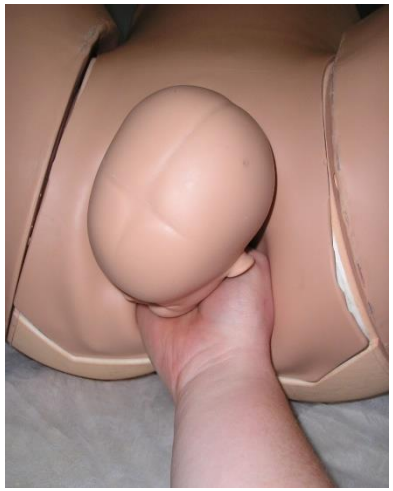


Suprapubic Pressure

- **Aims to reduce diameter of fetal shoulders** and **rotate the anterior shoulder into the wider oblique angle** of pelvis
- Apply suprapubic pressure **from side of fetal back** in a downward lateral direction
- **Apply** routine **'axial'** traction to fetal head to assess if manoeuvre has been successful

Internal manoeuvres *'Deal with what you feel'*

- Delivery of posterior arm and rotational manoeuvres both require **internal access**
- No room under the pubic arch
- **Most spacious part** of pelvis is in **sacral hollow**
- "Pringles manoeuvre"

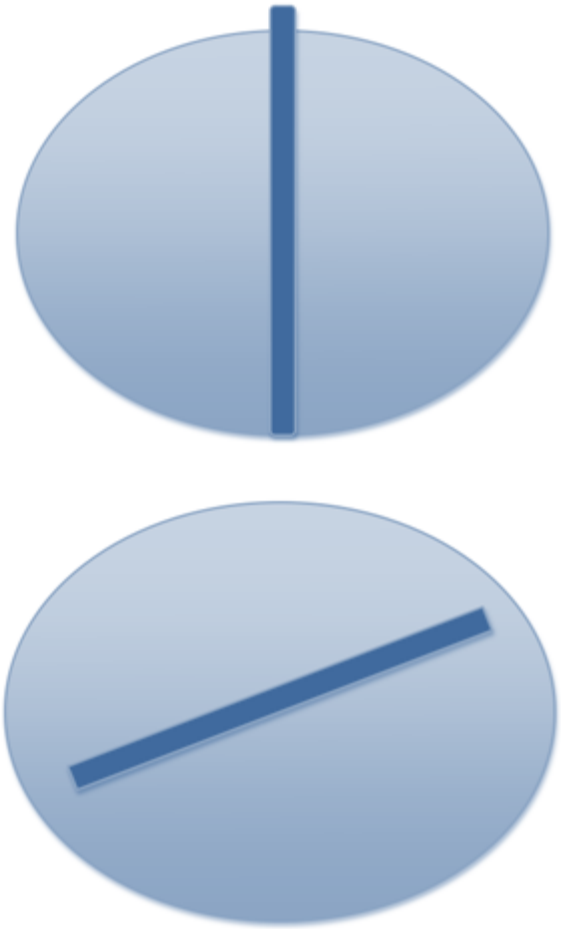


Delivery of the posterior arm

- **Reduces diameter of fetal shoulders** by an arms width
- Fetal arms often flexed across chest
- Enter posteriorly and feel for fetal wrist
- Grasp wrist and gently release arm in a straight line

Internal Rotation

- Move the fetal shoulders out of narrowest diameter of pelvis
- Apply pressure to posterior (back) or anterior (front) of fetal shoulder depending on access, to rotate fetus into oblique diameter of the pelvis
- Addition of supra-pubic pressure from assistant may help further



'All-fours McRoberts' position

- Essentially McRoberts' position but upside-down
- Ideal for slim mobile women and a ***single midwifery birth attendant***
- Ask mother to roll on to all-fours, with hips and knees flexed
- Simple change of position may help to release shoulders
- Routine axial traction can be applied to assess if manoeuvre has been successful
- **Remember: the sacral hollow is accessed <u>anteriorly</u> if internal manoeuvres are required with woman on 'all fours'**

What not to do !

- Nothing more than **routine 'axial' traction**
  - **Don't pull hard**
  - **Don't pull downwards**
  - **Don't pull quickly or with a 'jerk'**
- **Do not use fundal pressure** – increases impaction

Documentation

- Head & body delivery times
- Who was at the birth & who was called
- Which manoeuvres were performed & their order
- The degree and direction of traction applied
- The anterior shoulder at the time of the dystocia
- Condition of the baby at birth
  - Apgars
  - Cord Ph's
  - Signs of neonatal injury

Documentation proforma

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SHOULDER DYSTOCIA DOCUMENTATION

Date ..... Time .....

Person completing form .....

Designation .....

Signature .....

Mother's Name _____
Date of birth _____
Hospital Number _____
Consultant _____

Called for help at:		Emergency call via switchboard at:		
Staff present at birth of head:		Additional staff attending for birth of shoulders		
Name	**Role**	**Name**	**Role**	**Time arrived**

Maternal position when shoulder dystocia occurred (please circle) (i.e. prior to any procedures to assist)	Semi-recumbent	Lithotomy	Side-lying	All fours	Kneeling	Standing	Squatting	Other ....

Procedures used to assist birth	By whom	Time	Order	Details	Reason if not performed
McRoberts' position					
Suprapubic pressure				From maternal **left** / **right** (circle as appropriate)	
Episiotomy				Enough access / tear present /already performed (circle as appropriate)	
Delivery of posterior arm				**Right** / **left** arm (circle as appropriate)	
Internal rotational manoeuvre					
Description of rotation					
Description of traction	Routine (as for normal vaginal birth)	Other -		Reason if not routine	
Other manoeuvres used					

Mode of birth of head	Spontaneous		Instrumental – vacuum / forceps	
Time of birth of head		Time of birth of baby		Head-to-body birth interval
Fetal position during dystocia	Head facing maternal **left** **Left** fetal shoulder anterior		Head facing maternal **right** **Right** fetal shoulder anterior	
Birth weight kg	Apgar	1 min :	5 mins :	10 mins :
Cord gases	Art pH :	Art BE:	Venous pH :	Venous BE :
Explanation to parents	Yes	By	Risk incident form completed if clinical concerns	Yes / N/A

Neonatologist called: Yes / No Time arrived: ..... Neonatologists name: .....

Baby assessment at birth (maybe done by M/W):			**If yes to any of these questions, for review and follow up by Consultant neonatologist**
Any sign of arm weakness?	Yes	No	
Any sign of potential bony fracture?	Yes	No	
Baby admitted to Neonatal Intensive Care Unit?	Yes	No	
Assessment by			

Version 4.2

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Complications

- Brachial Plexus Injury

  -Incidence of permanent injury is between 8% and 12%

- Neonatal fractures – humerus and/or clavicle
- Hypoxia & stillbirth
- Maternal trauma

Postnatal care

- Neonatal review of baby
- Debrief parents and staff
- Referral for mode of birth discussion in next pregnancy

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Shoulder Dystocia-PROMPT foundation training video

- https://www.youtube.com/watch?v=UTz2eIiZOL8

ANY QUESTION?

In Summary

- Know what shoulder dystocia is
- What you need to do to resolve the emergency and deliver the baby
- Do not use prophylactic maneuvers, only act when problem identified