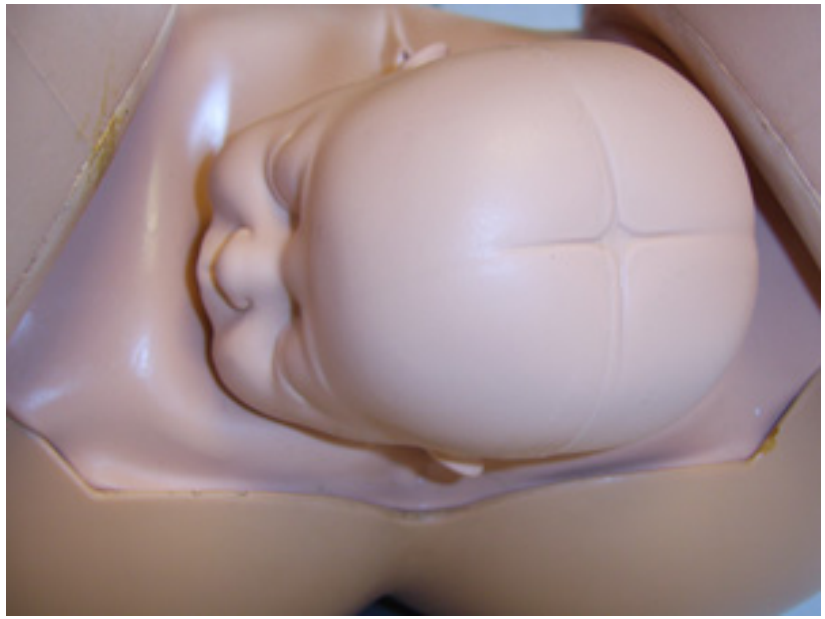
Shoulder Dystocia



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Shoulder Dystocia

Objectives:

- To provide a learning tool with both audio and visual material so as to improve knowledge and skills of shoulder dystocia amongst students and practitioners
- To utilise a systematic approach to manage this obstetric emergency
- To demonstrate the manoeuvres used to manage shoulder dystocia

Shoulder Dystocia

Definition:

- An obstetric life-threatening emergency in which one or both shoulders of the baby become trapped above the pelvic brim.

- This could be a unilateral dystocia in which the anterior shoulder becomes trapped above the symphysis pubis or bilateral dystocia where both shoulders are arrested above the pelvic brim

  (Henderson & Macdonald,1997;Coates, 2004).

- The term is used to describe births in which gentle traction is not effective and other manoeuvres are required to expedite the delivery (Hanretty, 2003).

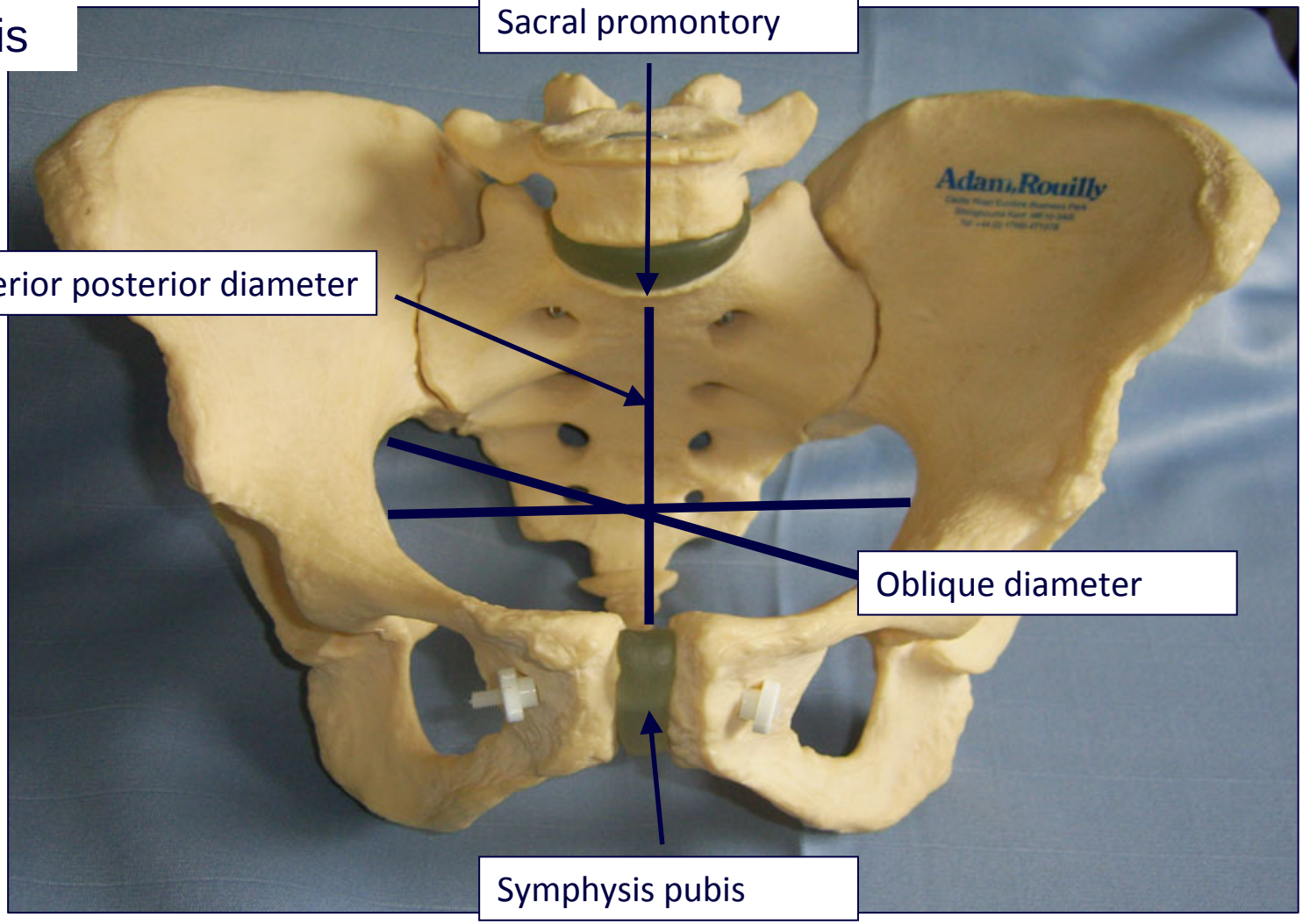
Shoulder Dystocia

Background:

- In most cases it's the anterior shoulder of the baby that becomes
- impacted against the symphysis pubis after the delivery of the head
- So this presentation will focus on an anterior impaction
- The overall incidence is 2-3% of deliveries
- With 48% of cases occurring in normal weight infants
- 0.3% in infants weighing 2500-4000grams
- 5-7% in infants weighing 4000-4500grams (RCOG, 2005)

Shoulder Dystocia

The pelvis



It is important to have a working knowledge of the female pelvis in order to understand how and where the impaction has occurred and how the manoeuvres will facilitate the delivery.

Shoulder Dystocia

Impaction of the anterior shoulder above the symphysis pubis.

The aim is to dislodge the impaction to free the shoulder and deliver the baby.

Shoulder Dystocia

Risk factors:

- Previous shoulder dystocia
- Previous baby >4.5kg
- Obesity
- Maternal Diabetes Mellitus/Gestational diabetes
- Big or macrosomic baby (>4.5kg)
- Abnormal pelvis (congenital malformation or Road Traffic Accident)
- Prolonged first stage of labour
- Oxytocic augmentation of labour
- Instrumental vaginal delivery

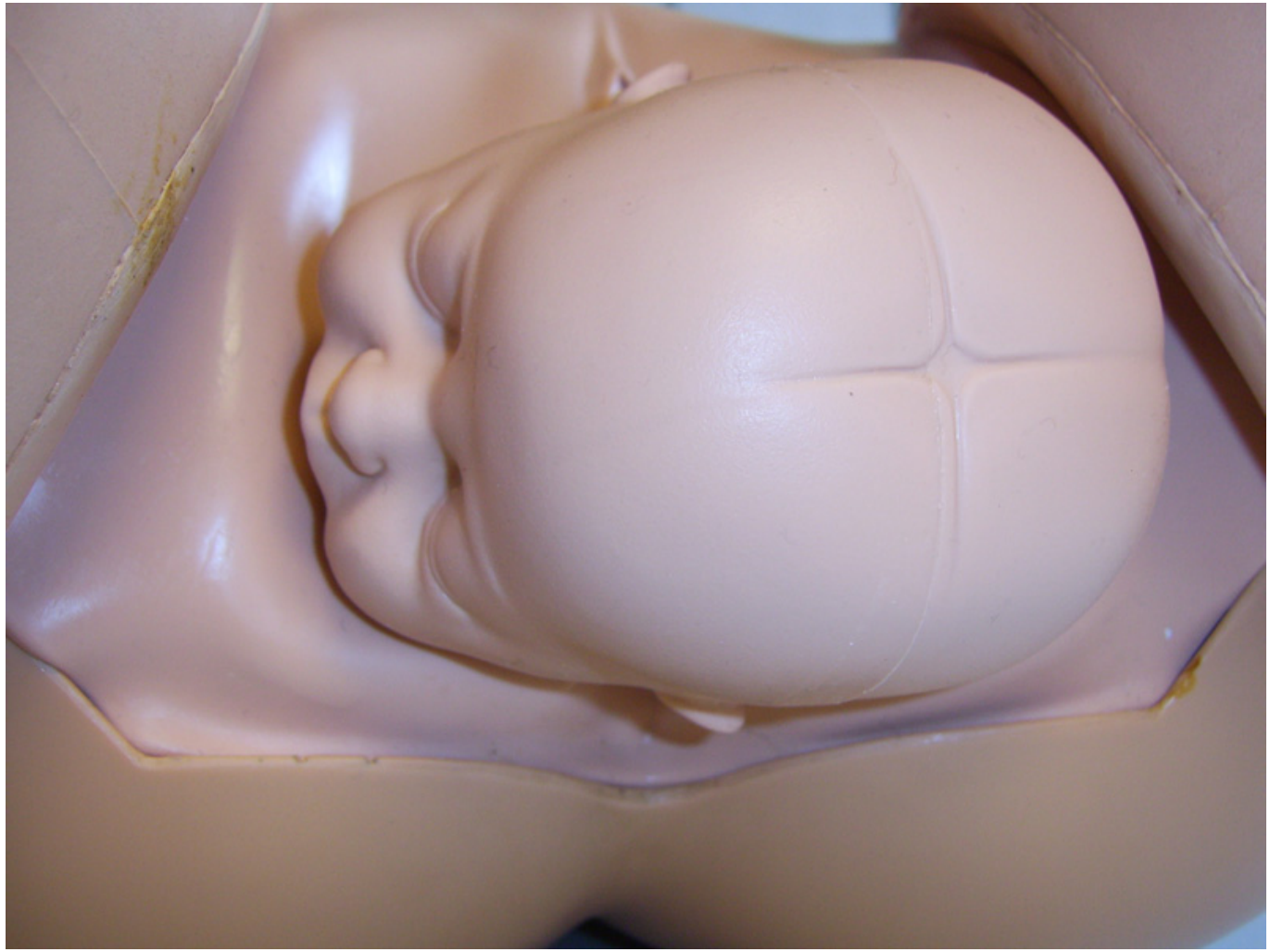
Shoulder Dystocia

Recognition of shoulder Dystocia

- **As the baby's head is delivered restitution is slow or absent**
- **The anterior shoulder fails to deliver with gentle traction**
- **Turtle necking occurs as the baby's chin retracts into the mothers perineum**
- **Head bobbing describes the jerking movement of the head as it stretches forward to attempt delivery but moves back to perineum as the shoulder is trapped**
- **The midwife should avoid cutting the cord and instead loop the cord over the head. Even if the cord is tight around the neck, the baby will still be getting some oxygen. If however the cord is cut and shoulder dystocia is then diagnosed, the obstetrician should be informed immediately on arrival**
- **This baby will need to be delivered as soon as possible so the mother will be transferred to theatre**

Shoulder Dystocia

Recognition of shoulder Dystocia



The head is tight against the perineum

Shoulder Dystocia

The HELPERR Mnemonic was devised by (ALSO® 2004) and (AAFP© 2004) to provide a systematic approach to manage this emergency

The midwife would:

H = call for Help
E = Evaluate for episiotomy
L = Legs into McRobert's position
P = Pressure (suprapubic)
E = Enter the vagina
R = Remove the posterior arm
R = Roll the patient unto hands and knees

Advanced Life Support in Obstetrics (ALSO ®2004)
American Academy for Family Physicians (AAFP© 2004)

Shoulder Dystocia

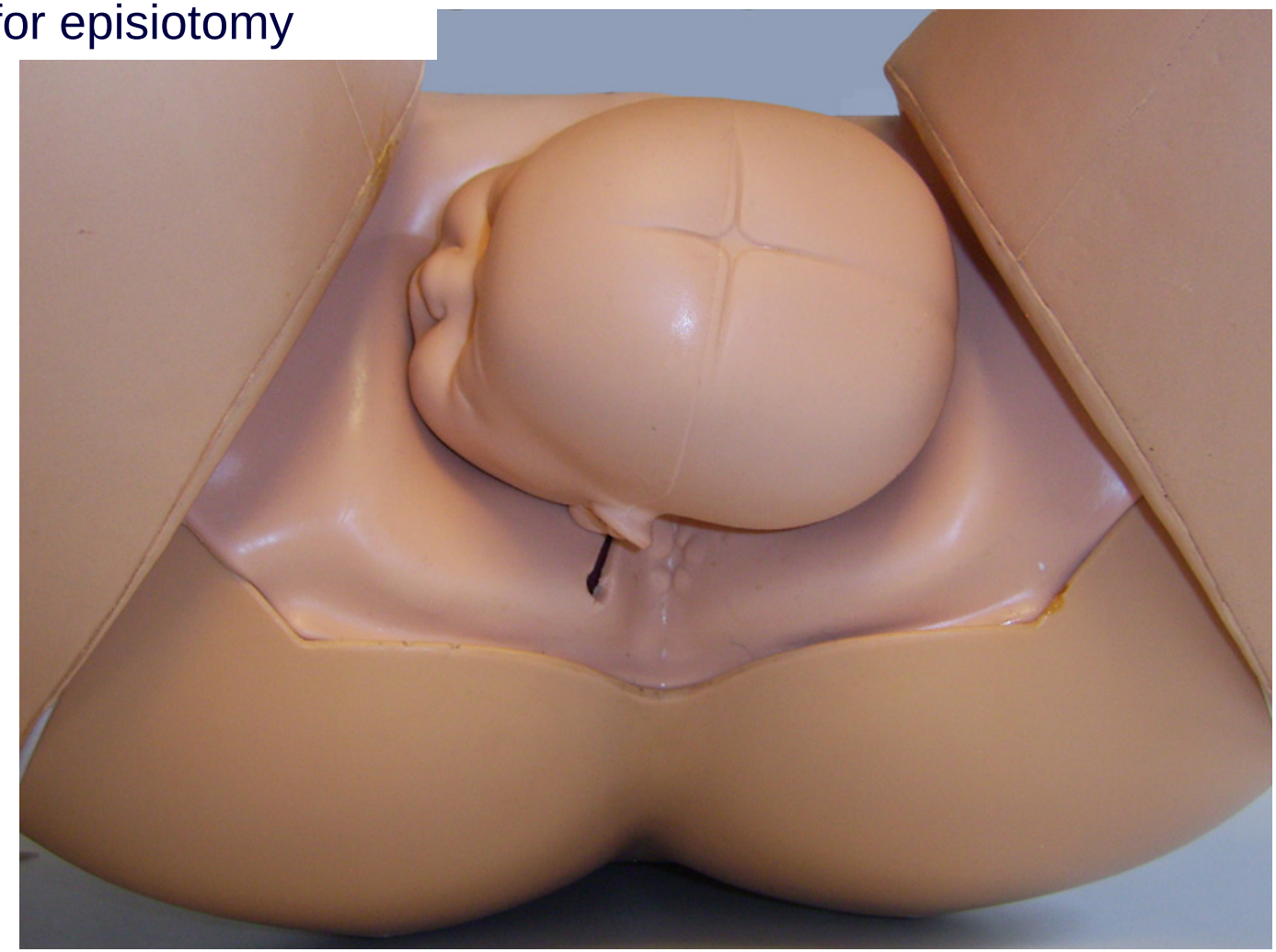
H = Help

Inform the mother of the situation and call for assistance to notify:

- Additional staff including the midwife in charge and another midwife to scribe and assist with the manoeuvres
- Obstetric team including the House Officer and Obstetric registrar to help with complicated manoeuvres
- Neonatologist to resuscitate the baby
- Anaesthetist in case the mother needs to be transferred to theatre

Shoulder Dystocia

Evaluate for episiotomy



Consider if episiotomy will provide additional room for the manoeuvres
This will not deliver the baby as it is a bony problem not a soft tissue problem

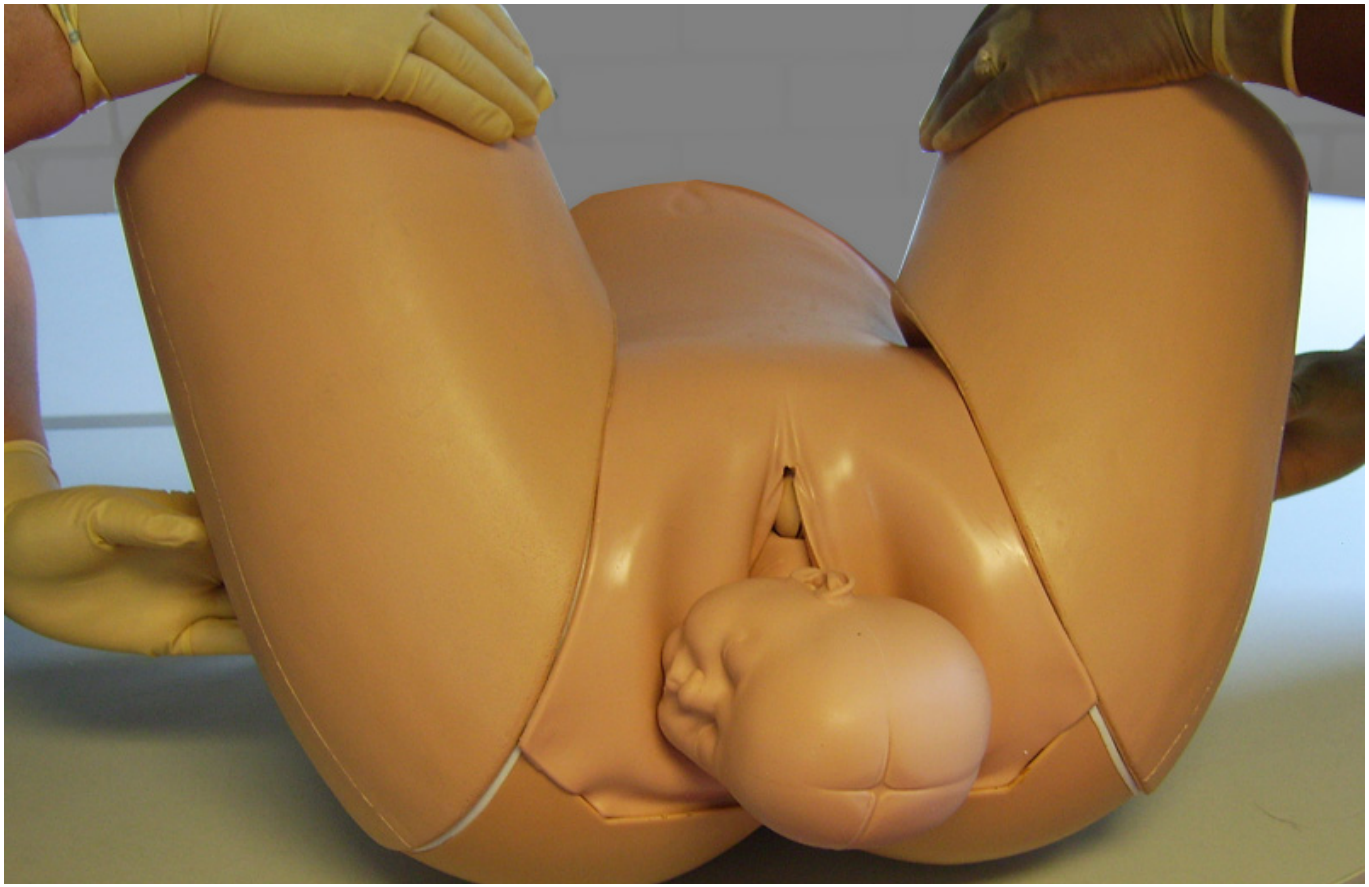
Shoulder Dystocia

L = Legs into Mc Roberts position

- Lower the back of the bed
- Two assistants may be required to help flex the mother's hips so that her knees points towards her chest and thighs on her abdomen.
- The midwife attempts to deliver baby in this position which is effective in most cases

Shoulder Dystocia

Effects of McRobert's position



- Straightens the lumbosacral lordosis
- Increases anterior posterior diameter of the pelvis
- Flexes the fetal spine
- This position is effective in more than 40% of cases of shoulder dystocia

Shoulder Dystocia

P = Pressure (Suprapubic pressure)

The midwife or obstetrician should inform their assistant whether the baby's back is on mother's left or right

Suprapubic pressure is applied with hands held in CPR style position by assistant

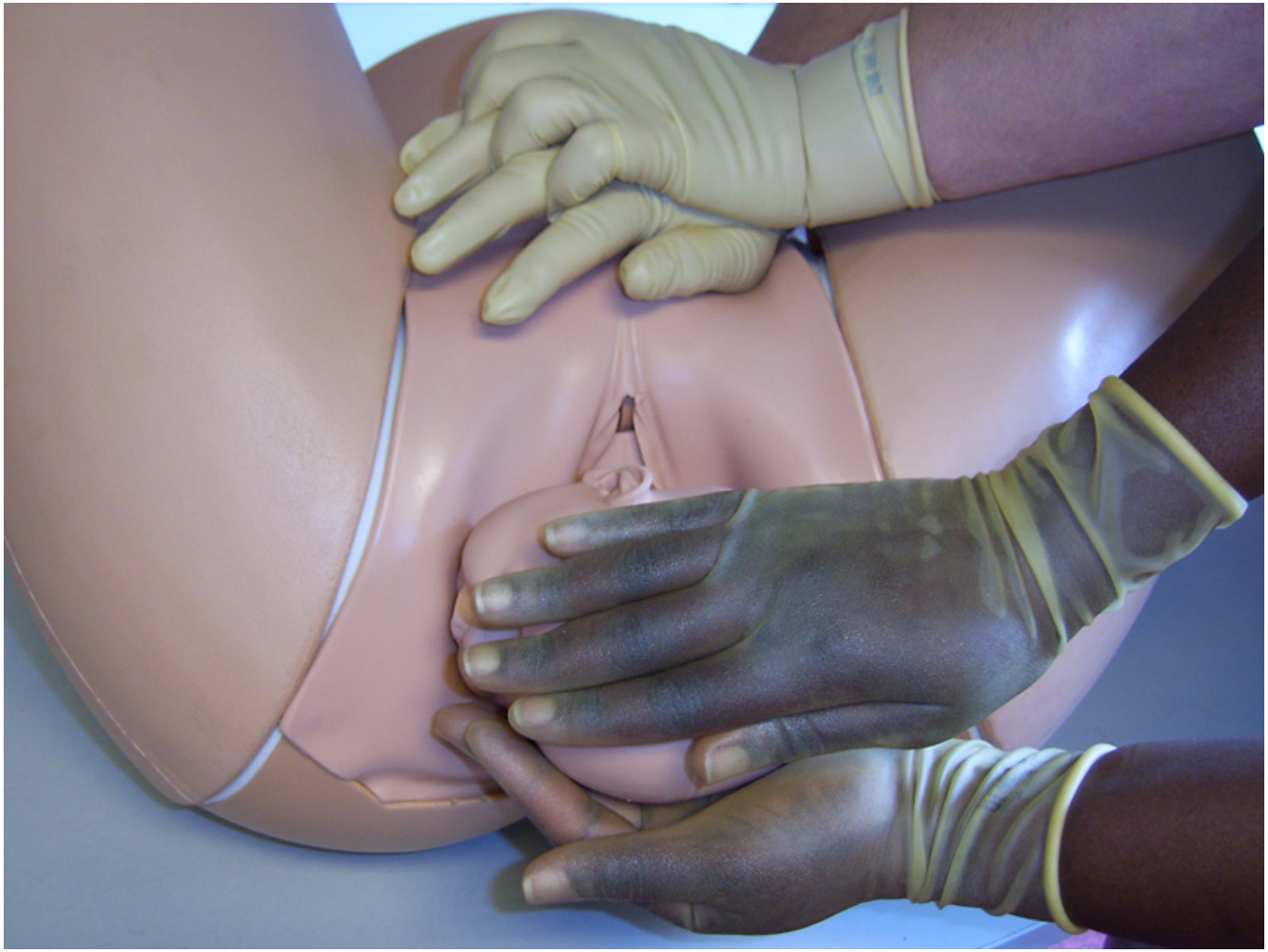
Firm pressure is applied above symphysis pubis to adduct the anterior shoulder and reduce the bisacromial diameter

Pressure is applied continuously for 30-60 seconds, then in a rocking motion for the same time

The midwife should attempt deliver during this time

Shoulder Dystocia

Suprapubic pressure



Fundal pressure is never appropriate and only serves to worsen the impaction.

Shoulder Dystocia

Manoeuvres

There are three manoeuvres on entering the vagina:

- Rubin manoeuvre
- Woodscrew manoeuvre
- Reverse woodscrew manoeuvre

Shoulder Dystocia

Rubin Manoeuvre

Enter the vagina posteriorly; move fingers up to the posterior aspect of the anterior shoulder

Exert pressure on the scapula to adduct the shoulder and move it from the AP position to the oblique position

This effect of this is the same as in applying supra-pubic pressure, but it is now done internally