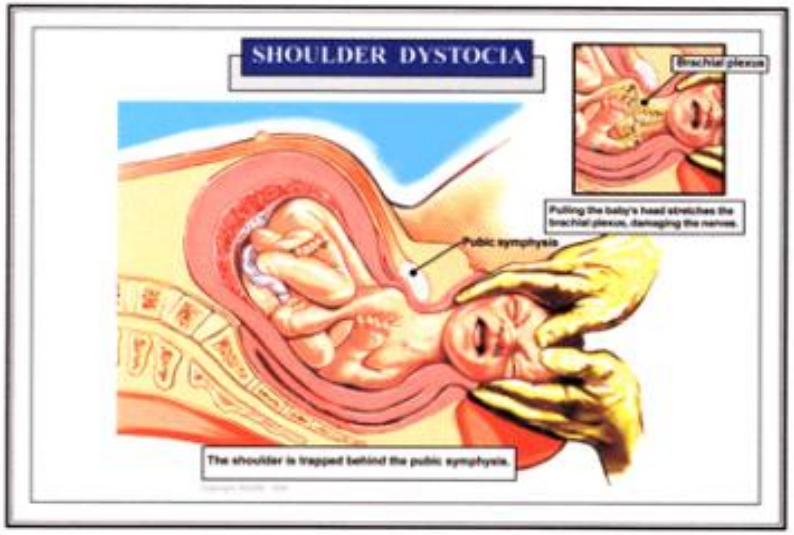
Shoulder Dystocia



Objectives

- Define shoulder dystocia
- Describe maternal and fetal complications
- Describe risk factors for a shoulder dystocia
- Recognize warning signs of a shoulder dystocia
- Describe the management of a shoulder dystocia
- Demonstrate application of Mc Robert's Maneuver and suprapubic pressure

What is a shoulder dystocia?

- Shoulder dystocia is an obstetric emergency in which one of the fetal shoulders becomes impacted against the pelvic bones, thus requiring additional maneuvers to achieve delivery (Fahey & Mighty, 2008)
- It is an obstetric emergency that requires immediate recognition and a well-coordinated response (Fahey & Mighty, 2008)
- Shoulder dystocia is unpredictable and can occur in a baby of any weight (McKinney, James, Murray, Nelson & Ashwell, 2011)

Shoulder Dystocia Video

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Incidences of Shoulder Dystocia

- Though rare, the incidence of shoulder dystocia is rising due to increasing birth weights
- It is estimated that shoulder dystocia complicates an estimated 0.6% to 2% of vaginal deliveries

(Fahey & Mighty, 2008; Ricci & Kyle, 2009)

What's the problem?

FAILURE OF THE SHOULDERS TO DELIVER SPONTANEOUSLY PLACES BOTH THE WOMAN AND THE FETUS AT RISK FOR INJURY (RICCI & KYLE, 2009)

Maternal Complications

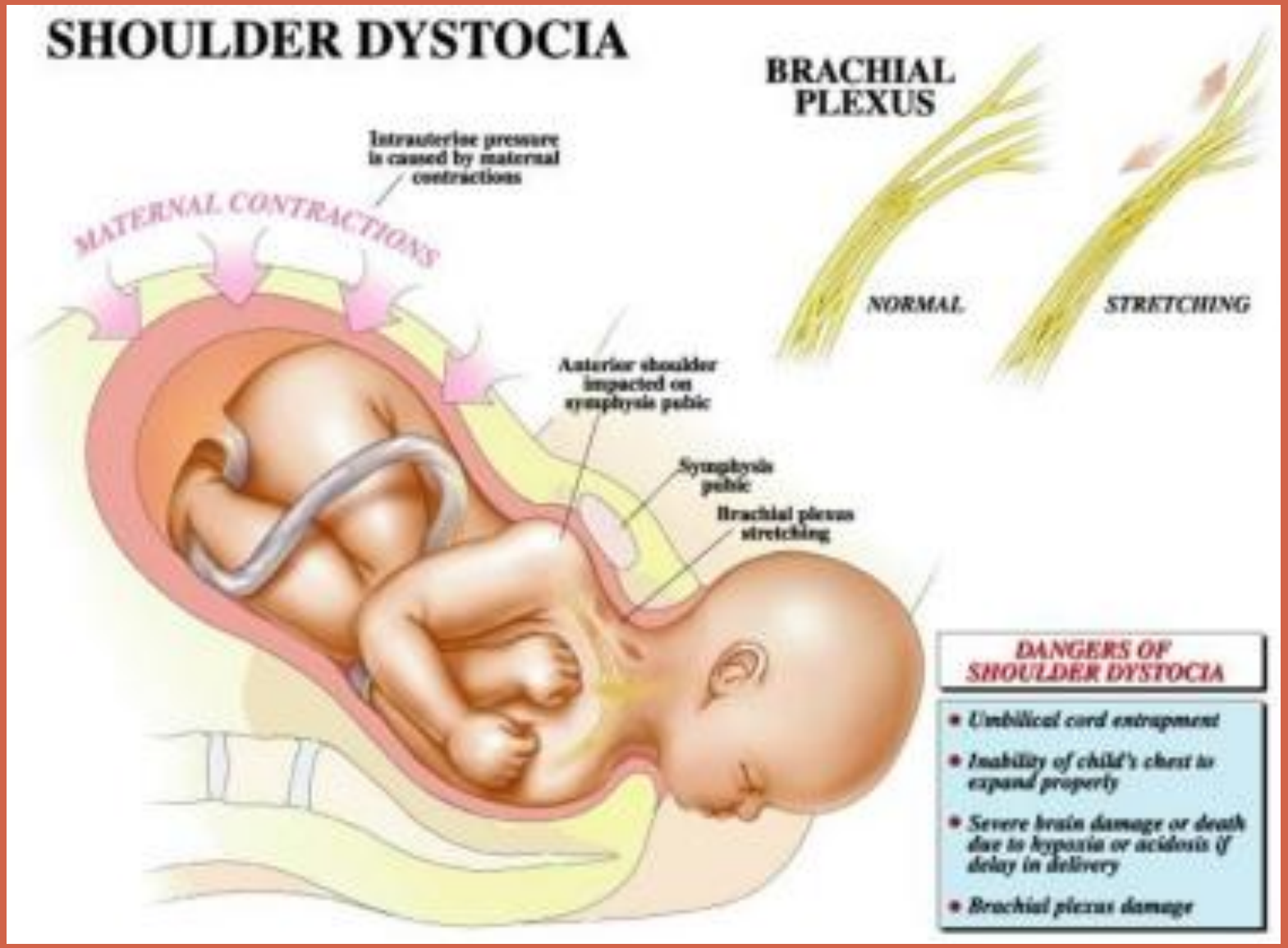
- Episiotomy
- Extended Lacerations (Fourth Degree)
- Hematomas
- Uterine atony
- Hemorrhage
- Bladder Injury
- Rectal Injury

(Dantas, n. d.)

Fetal Complications

- Clavicular Fracture (1.7 to 9.5 percent)
- Humerus Fracture (0.1 to 4.2 percent)
- Brachial plexus injury or other spinal nerve damage (0.5 to 1.6 percent)
  - Erb's palsy
- Hypoxic brain injury *(0.3 percent)*
- Death*(0 to 0.35 percent)*

(Gherman, 2006)


SHOULDER DYSTOCIA
BRACHIAL PLEXUS
Intrauterine pressure is caused by maternal contractions
MATERNAL CONTRACTIONS
NORMAL
STRETCHING
Anterior shoulder impacted on symphysis pubic
Symphysis pubic
Brachial plexus stretching
DANGERS OF SHOULDER DYSTOCIA
• Umbilical cord entrapment
• Inability of child's chest to expand properly
• Severe brain damage or death due to hypoxia or acidosis if delay in delivery
• Brachial plexus damage

Who's at risk?

Maternal Risk Factors

- Maternal diabetes
- Postdates
- Maternal Obesity
  - High gestational weight gain
- Advanced Maternal Age
- Abnormal pelvic anatomy
- Short Stature
- History of previous shoulder dystocia
  - 1-25% of recurrence
- **Labor Related**
  - Assisted vaginal delivery (vacuum or forceps)
  - Prolonged active phase of labor
  - Prolonged second-stage of labor

Fetal Risk Factors

- Macrosomia (EFW>4500)
- Malpositioned
  - Cardinal movements

(Dantas, n. d.; Gherman, 2006; McKinney et al., 2011)

Warning Signs

- Prolonged Labor
- “Turtle Sign”
  - As soon as the head is born, it retracts against the perineum, much like a turtle's head drawing into its shell.
- Failure of the shoulders to complete external rotation

(McKinney et al., 2011)

Shoulder Dystocia Management

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- Call for help
- Evaluate for episiotomy
- Legs (The Mc Roberts Maneuver)
- Suprapubic pressure to disengage anterior shoulder
- Enter internal rotation maneuvers (“wood screw”
- Remove the posterior arm
- Roll the patient (hands and knees)

**Make sure to note start time of dystocia and delivery time

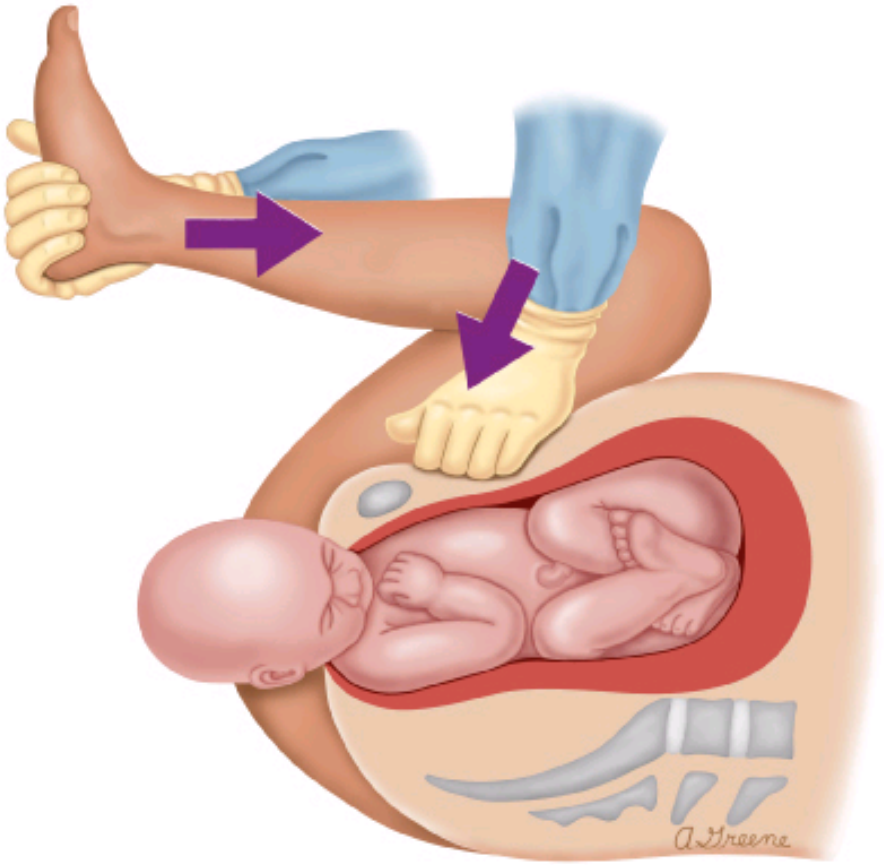
(Dantas, n. d.)

Mc Roberts Maneuver and Suprapubic Pressure

- Mc Roberts Maneuver
  - Flex the legs towards the patient's chest to open the anterior posterior diameter of the pelvis
- Suprapubic Pressure
  - Apply a "rolling pressure over the fetal anterior shoulder on mother's lower abdomen so the shoulder will adduct and pass under the symphysis

(Dantas, n. d.; McKinney, 2011)

McRoberts maneuver and suprapubic pressure



An assistant applies pressure suprapubically with the palm or fist, directing the pressure on the anterior shoulder both downward (to below the pubic bone) and laterally (toward the baby's face or sternum), and in conjunction with the McRoberts maneuver. Suprapubic pressure is supposed to adduct the shoulders or bring them into an oblique plane, since the oblique diameter is the widest diameter of the maternal pelvis. It is most useful in mild cases and those caused by an impacted anterior shoulder.

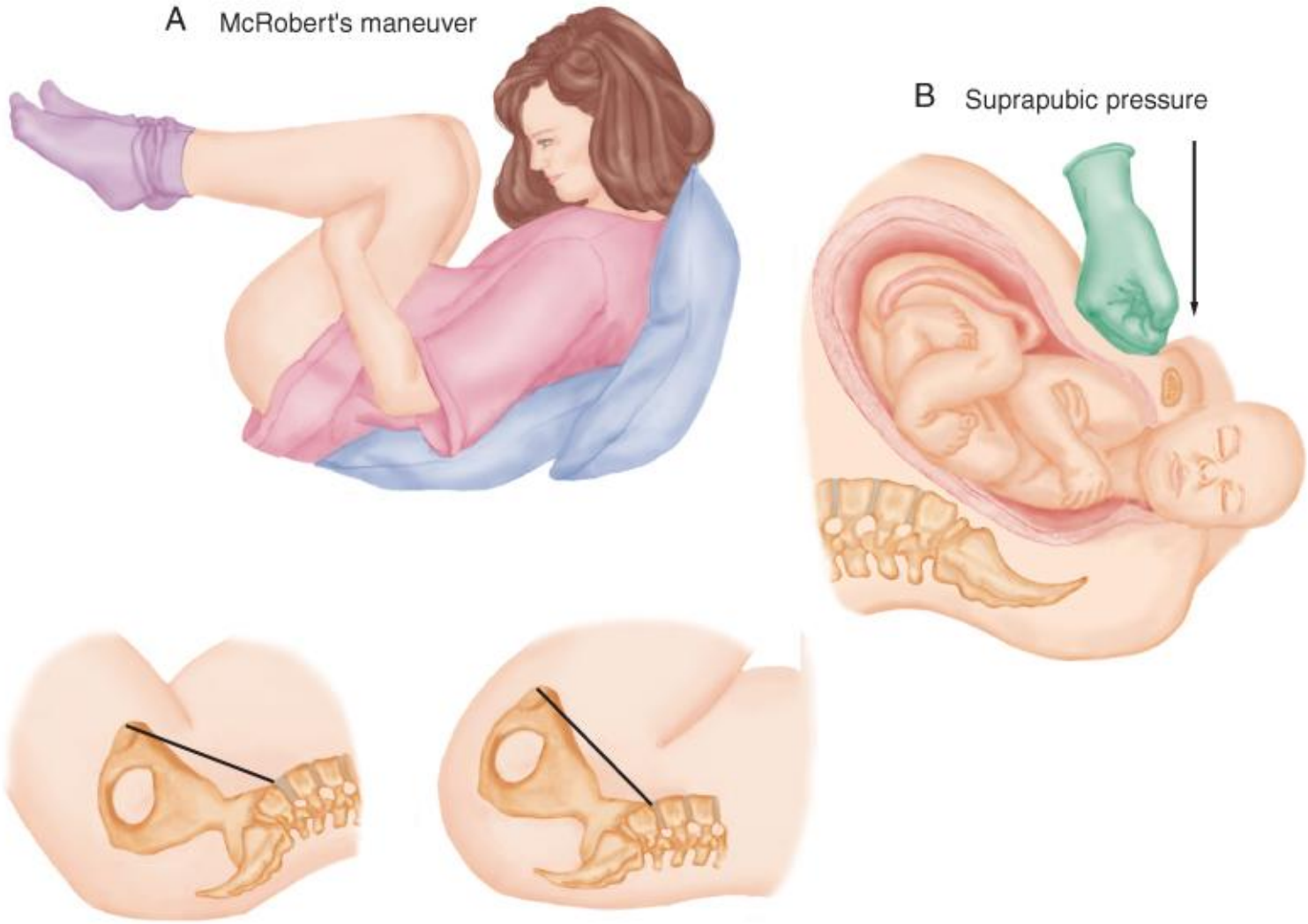


FIG 27-1 Methods used to relieve shoulder dystocia. **A,** McRoberts maneuver. The woman flexes her thighs sharply against her abdomen, which straightens the pelvic curve. A supported squat has a similar effect and adds gravity to her pushing efforts. **B,** Suprapubic pressure by an assistant pushes the fetal anterior shoulder downward to displace it from above the mother's symphysis pubis. Fundal pressure should not be used because it will push the anterior shoulder more firmly against the mother's symphysis.

More on Shoulder Dystocia

- ****Never apply Fundal Pressure****
  - This can further impact the shoulder under the pubic bone
- Be Prepared and Assess for Maternal/Fetal Complications
  - Maternal
    - PP hemorrhage
    - Perneal trauma
  - Fetal
    - Birth Trauma
    - Hypoxia
- Documentation
  - Severity of Dystocia
  - Maneuvers Used
  - Management and Timing
  - Newborn assessment

Questions?

PRACTICE SESSION:
MCROBERT'S MANEUVER
SUPRAPUBIC PRESSURE

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