Shoulder Dystocia: Diagnosis and Intervention

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Acknowledgments

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Purpose

The purpose of this continuing education course is to provide nurses with a thorough understanding of shoulder dystocia and the emergency management of this condition. Risk factors, management techniques and potential complications will be explored, as well as the role of each member of the labor and delivery team.

Learning Objectives

1. Define shoulder dystocia
2. Identify three risk factors for shoulder dystocia
3. Discuss brachial nerve injuries
4. Describe the technique to be used for McRoberts' and Rubin's Maneuvers, and the application of suprapubic pressure
5. Discuss the labor and delivery nurse's role in managing shoulder dystocia
6. List two possible complications of shoulder dystocia

Introduction

Shoulder dystocia, an obstetric complication of vaginal deliveries, was first described in 1730. This complication occurs when one or both shoulders become lodged behind the mother's pubic symphysis (Allen & Gurewitsch, 2016). The entrapment of the infant's shoulders, after the delivery of the head, is an emergency.

There is evidence that checklists/protocols and simulation may be used to enhance team performance. It is imperative that the delivery team members are comfortable with the roles they will be expected to play in this emergent situation and are able to coordinate efforts to deliver the infant's shoulders safely and in a timely manner. Use of protocols and a concerted team approach may enhance best outcomes for both mother and infant (Chauhan, 2014).

Note!

- Shoulder dystocia most commonly occurs when the bisacromial (breadth of the shoulders) diameter exceeds the diameter of the pelvic inlet, and attempts at gentle downward traction are unsuccessful (Gobbo, Waren, & Hinshaw, 2012).

Incidence of Shoulder Dystocia

It is difficult to ascertain the exact incidence of shoulder dystocia due to the variances in definition and failure to document for fear of litigation. Although the failure to birth the shoulders is a true shoulder dystocia, many healthcare professionals use the term broadly, to include deliveries in which the presentation of the shoulders are not obstructed but are merely a tight fit (Hill & Cohen, 2016).

Shoulder dystocia is estimated to occur in 0.15-2% of births (Hill & Cohen, 2016). Although this obstetrical emergency occurs infrequently, and most cases of shoulder dystocia can be treated without permanent injury, complications do occur.

Complications: Infant

- Neonatal brachial plexus palsy: 1 per 1000 births
- Hypoxic ischemic encephalopathy: 3 per 100,000 births
- Permanent neonatal brachial plexus palsy: 1 in 10,000 births
- Litigation for palsy: 1 in 45,000 births
  (Chauhan, 2014)

Complications: Maternal

- Postpartum hemorrhage: 11%
- Fourth-degree lacerations: 3.8%

Risk Factors

The risk of shoulder dystocia presentations in a woman is dependent upon a variety of factors, including:

- Macrosomia:
- Previous history of shoulder dystocia or brachial plexus injury
- Maternal obesity
- Diabetes mellitus
- Excessive weight gain
- Dysfunctional labor patterns
- Instrument delivery
- Prolonged second stage of labor
- Induction or augmentation of labor
- Male infants have shoulder dystocia more frequently than females (Hill & Cohen, 2016, Allen & Gurewitsch, 2016).

Test Your Knowledge

Complications from shoulder dystocia occur:

A. Only to the infant
B. Only to the mother
C. To both mother and infant
D. When shoulder dystocia is not recognized

Rationale: Complications: Infant

- Neonatal brachial plexus palsy: 1 per 1000 births
- Hypoxic ischemic encephalopathy: 3 per 100,000 births
- Permanent neonatal brachial plexus palsy: 1 in 10,000 births
- Litigation for palsy: 1 in 45,000 births

Complications: Maternal

- Postpartum hemorrhage: 11%
- Fourth-degree lacerations: 3.8%

Prediction

Many strong risk factors for an outcome are poor predictors of the actual outcome.

Despite well-defined risk factors, shoulder dystocia is impossible to predict.

- Patients with *no risk factors* may experience shoulder dystocia, such as a small-for-gestational-age infant
- Patients with *multiple risk factors* may not experience shoulder dystocia

The poor predictability, less than 33%, relates to shoulder dystocia being caused by a dynamic or evolving mechanical event, rather than by simply the presence of specific antenatal or intrapartum clinical risk factors (Allen & Gurewitsch, 2016 & Hill & Cohen, 2016).

Although predictability is imperfect, a thorough risk assessment should be completed, and preemptive cesarean should be considered with very high-risk patients (Hill & Cohen, 2016).

Macrosomia

Macrosomia is an infant with excessive birth weight. The American College of Obstetricians and Gynecologists (ACOG) defines macrosomia as an infant who weighs 4,500 grams (9 lbs., 1 oz.) or more (American College of Obstetricians and Gynecologists (ACOG), 2012). In addition, macrosomia is associated with a disproportionately larger body to head size (Allen & Gurewitsch, 2016).

An 11 lb Infant. Image courtesy of Wikipedia (2013). Reproduced under the GNU Free Documentation License.

Since increased birth weight is associated with shoulder dystocia, the nurse should recognize factors associated with a larger baby:

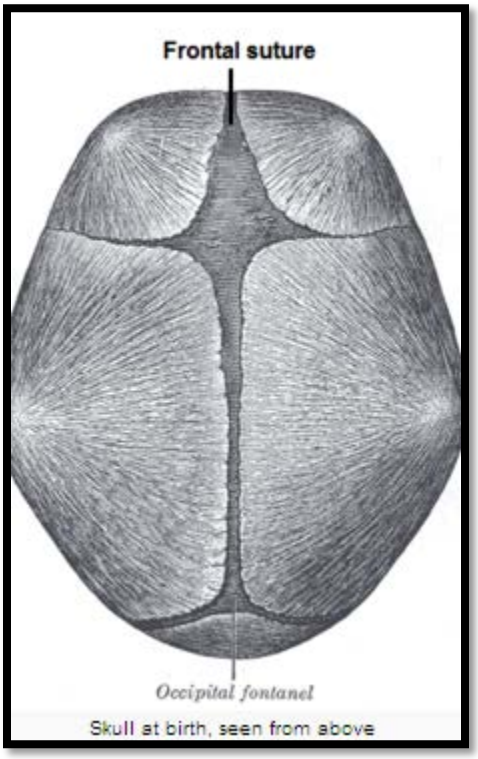
- History of large infants in the family
- Large size difference between parents
- History of gestational diabetes in a previous pregnancy

Gestational Diabetes (GD)

It is well-known that gestational diabetes is a risk factor for a large fetus. When a mother develops gestational diabetes, the extra glucose in the maternal bloodstream crosses the placenta and triggers extra insulin production in the fetal pancreas. This can result in a macrosomic infant.

During delivery, the chest of a macrosomic infant of a mother with diabetes will be the largest area of the body to pass through the birth canal.

The head of the infant can mold and adapt to the dimensions of the birth canal, due to the presence of soft sutures and fontanels. However, the shoulders cannot mold in any way and are thus dependent upon position and rotation to navigate the birth canal.



Frontal Suture. Image provided by Wikipedia (2013).

Forceps Delivery and Vacuum Extraction

Assisted delivery with either forceps or vacuum extraction has been associated with a higher risk of shoulder dystocia. The association may be explained by the use of more complex maneuvers and may result in fetal injury (Hill & Cohen, 2016).

Sarindam7 (2008). Copyright permission granted under the Creative Commons Attribution-Share Alike 3.0

Prolonged Second Stage of Labor

Prolonged second stage of labor (greater than two hours, or more than three hours with an effective epidural) in a primigravida (a woman pregnant for the first time), may signal an increased risk for shoulder dystocia (Hill & Cohen, 2016).

A second stage greater than one hour should increase suspicion for a multiparous woman to have a shoulder dystocia (Hill & Cohen, 2016).

Maternal Obesity

Maternal obesity should be addressed *before* pregnancy whenever possible as substantial weight loss is not prudent during gestation due to the risk of small for gestational age infants. However, moderation of caloric intake and careful attention to weight gain does reduce the risk of macrosomia in women with obesity.

Note!

- Despite the identification of numerous risk factors for shoulder dystocia, physicians agree that it is impossible to predict shoulder dystocia accurately, even when there are several risk factors present.

Previous History of Shoulder Dystocia

A previous shoulder dystocia increases the risk of recurrence up to 10–20%. Subsequent deliveries often have a higher incidence of associated brachial palsy injury than the primary delivery. These observations make it reasonable to offer cesarean delivery to patients with a history of shoulder dystocia in a previous pregnancy, particularly if there are other associated risk factors present (Hill & Cohen, 2016).

Test Your Knowledge

A predictive risk for shoulder dystocia includes:

A. An unusual presentation of the fetus
B. An infant weighing 6-10 pounds
C. A history of brachial palsy injury
D. A low-birth weight infant

Rationale: A previous shoulder dystocia increases the risk of recurrence y up to 10–20%. Subsequent deliveries often have a higher incidence of associated brachial palsy injury than the primary delivery.

Practice Bulletin 178: Shoulder Dystocia

The American College of Obstetricians and Gynecologists (ACOG) have developed and published new guidelines for the clinical management of shoulder dystocia (ACOG, 2017). These guidelines state:

- Although there are many known risk factors, shoulder dystocia cannot be accurately predicted or prevented. Clinicians should be aware of the risk factors for shoulder dystocia to anticipate those deliveries at high risk and should be prepared to address this complication in all deliveries.
- Elective cesarean delivery should be considered for women without diabetes who are carrying fetuses with suspected macrosomia with an estimated fetal weight of at least 5,000 g and for women with diabetes whose fetuses are estimated to weigh at least 4,500 g.
- When shoulder dystocia is suspected, the McRoberts maneuver should be attempted first because it is a simple, logical, and effective technique.
- Contemporaneous documentation of the management of shoulder dystocia is recommended to record significant facts, findings, and observations about the shoulder dystocia event and its sequelae.
- Simulation exercises and shoulder dystocia protocols are recommended to improve team communication and maneuver use because this may reduce the incidence of brachial plexus palsy associated with shoulder dystocia.
- In cases where the McRoberts maneuver and suprapubic pressure are unsuccessful, delivery of the posterior arm can be considered as the next maneuver to manage shoulder dystocia.
  (ACOG, 2017)

Presenting Signs of Shoulder Dystocia

At the time of birth, there are two signs that are used to diagnose a shoulder dystocia event; these are:

- The Turtle Sign
- Failure of spontaneous external rotation

The Turtle Sign

Occurs when the infant's head emerges and then retracts (pulls back) against the mother's perineum, like a turtle going back into its shell. This causes the baby's cheeks to bulge.

This sign, while suggestive, IS NOT diagnostic!

(ACOG, 2017)

The Turtle Sign. Image provided courtesy of Kristina Kruzan (2013).

Failure of spontaneous external rotation and restitution: On occasion, the fetal head wiggles from side to side and doesn't rotate into the oblique parameter of the pelvis. When this occurs, a moderate amount of traction is not enough to deliver the anterior shoulder.

Test Your Knowledge

The American College of Obstetricians and Gynecologists Practice Bulletin 178: Shoulder Dystocia state that the following maneuver should be used first:

A. Corkscrew
B. Zavanelli
C. McRoberts
D. Rubin

Rationale: When shoulder dystocia is suspected, the McRoberts maneuver should be attempted first because it is a simple, logical, and effective technique.

Image of the Pelvic Outlet

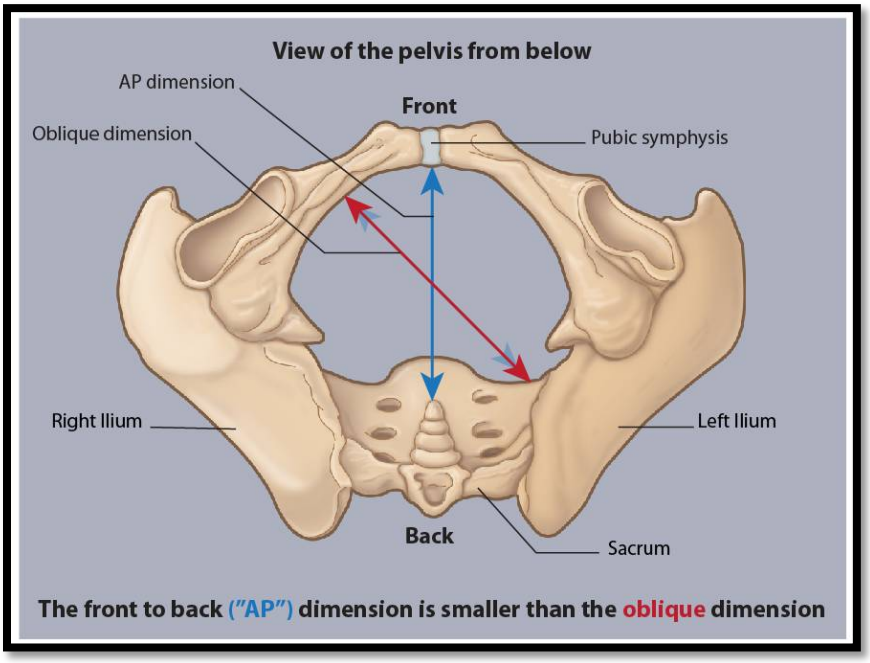


Image used with permission from birthinjury.org (2013). www.birthinjury.org

Management

During an otherwise normal delivery, the discovery of shoulder dystocia can result in fear and anxiety in the team as well as the patient who is reacting to the team's change in attitude. Although, shoulder dystocia is considered an obstetrical emergency, this is NOT the time for hasty maneuvers. Deliberate, logical, and coordinated steps should be taken to ensure the safe delivery of the infant. Taking several minutes to deliver the infant rarely results in significant morbidity, especially with normal fetal oxygenation (Hill & Cohen, 2016).

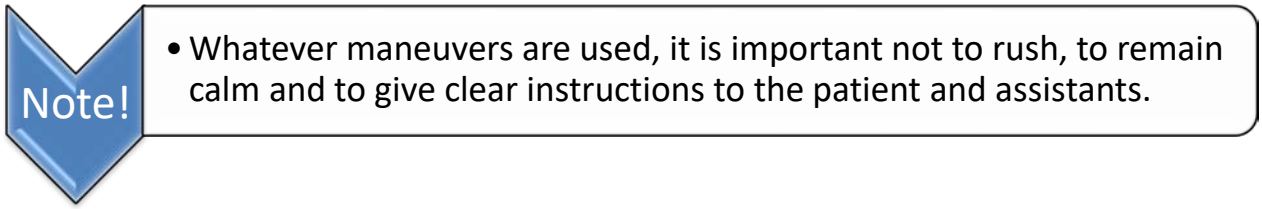
Once the fetal head has delivered during a shoulder dystocia, the risk of umbilical cord compression between the fetus and the maternal pelvis increases. This compression could result in fetal hypoxemia, metabolic acidosis, and permanent neurological damage or death, if the delivery of the body is not expedited (Gobbo et al., 2012).

The time interval considered safe from the moment of the delivery of the fetal head to the resolution of the shoulder dystocia and delivery of the infant is not clear (Gobbo et al., 2012).

There is not strong evidence to support the superiority of any sequence of manipulations as most recommendations are based on clinical experience.

Intense fundal pressure, downward traction on the fetal head or repeated forceful suprapubic pressure should be avoided, as these actions are likely to result in injury.

An episiotomy may be appropriate; although, it will not relieve the obstruction, facilitation of intravaginal or intrauterine manipulations may be enhanced.
(Hill & Cohen, 2016)



Test Your Knowledge

Shoulder dystocia is an obstetrical emergency, therefore:

A. The fetus must be delivered immediately
B. The obstetrician must begin a cesarean section immediately
C. Deliberate, logical, and coordinated steps are important
D. Taking additional time to deliver the infant is detrimental

Rationale: Although, shoulder dystocia is considered an obstetrical emergency, this is NOT the time for hasty maneuvers. Deliberate, logical, and coordinated steps should be taken to ensure the safe delivery of the infant. Taking several minutes to deliver the infant rarely results in significant morbidity, especially with normal fetal oxygenation (Hill & Cohen, 2016).

Protocol Use

It is vital to have a shoulder dystocia protocol; which is known and practiced by the delivery team. Be sure to know, practice, and utilize the protocol unique to your institution.

Use of the protocol will help ensure that the help needed, is summoned in a timely manner and the team is ready to deliver the fetus.

The following protocol is an example and is not intended to be the only way a protocol should be written.

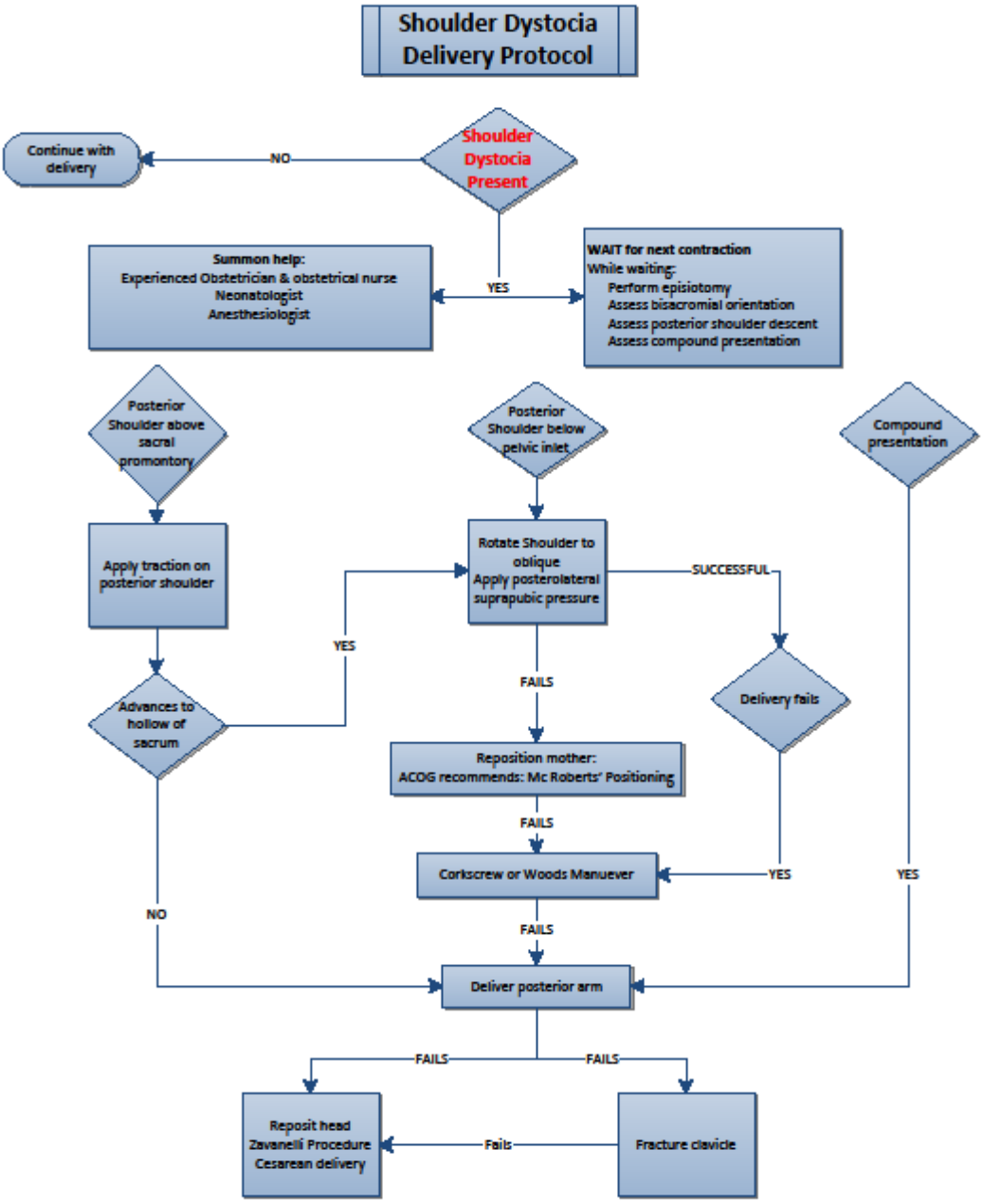


Figure 1 Compiled from ACOG, 2017; Hill & Cohen, 2016; Allen & Gurewitsch, 2016; & Lerner, 2017.

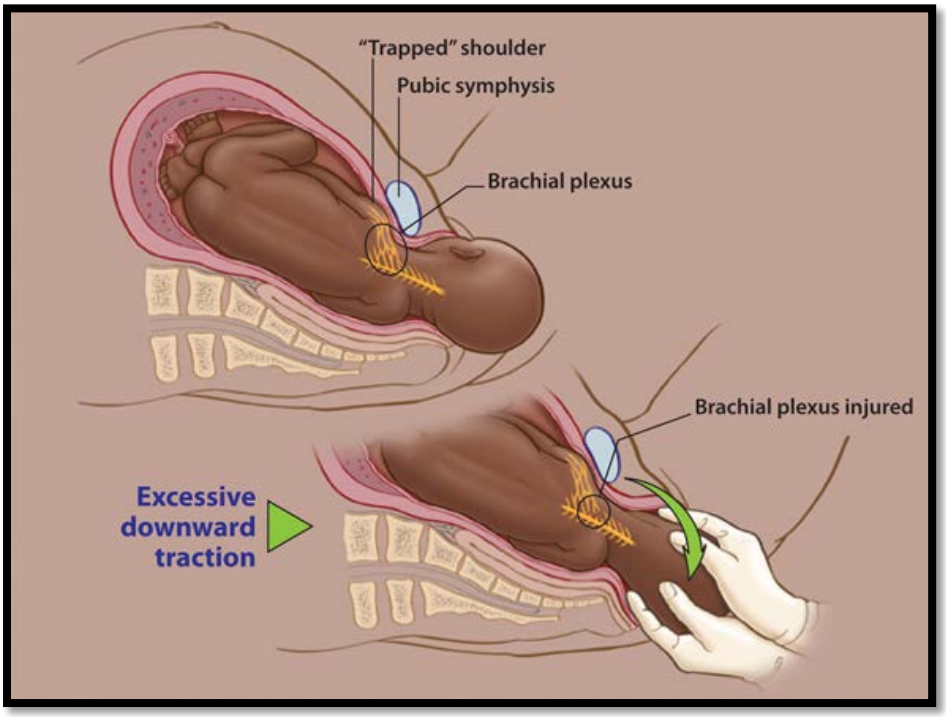
When Shoulder Dystocia Occurs

Stop maternal pushing

It's important to note that the mother should not push, except when instructed to and only when it's believed the shoulder has been released. If the mother continues to push, her uterus could rupture, and the shoulder could be impacted more tightly with bruising.

Avoid Excessive Traction

The clinician delivering the infant should never continue to apply traction to the fetal head if the shoulder does not follow easily. Once shoulder dystocia is diagnosed, all attempts to deliver the baby by continued pulling should be ceased immediately. The shoulder dystocia maneuvers should then be systematically employed, without the use of excessive traction or force.



Excessive Downward Traction Can Cause Brachial Nerve Injury. Image used with permission from birthinjury.org (2013). www.birthinjury.org.

Avoid Fundal Pressure

Application of pressure over the fundus of the uterus is **never appropriate** and only serves to worsen the impaction, potentially injuring the fetus and/or mother (Gobbo et al., 2012).

Test Your Knowledge

What type of pressure should be avoided during a shoulder dystocia delivery?

A. Fundal
B. Suprapubic
C. Symphysis pubis
D. Sacral promontory

Rationale: Application of pressure over the fundus of the uterus is **never appropriate** and only serves to worsen the impaction, potentially injuring the fetus and/or mother (Gobbo et al., 2012).

Maneuvers

The research evidence suggests that simulated training for the obstetrician and delivery team result in superior outcomes (Hill & Cohen, 2016). By preparing for this emergency as a team, the execution of the maneuvers necessary for a safe delivery can be done effectively with everyone knowing the role they need to play.

All maneuvers described here should only be done by a trained and experienced staff member.

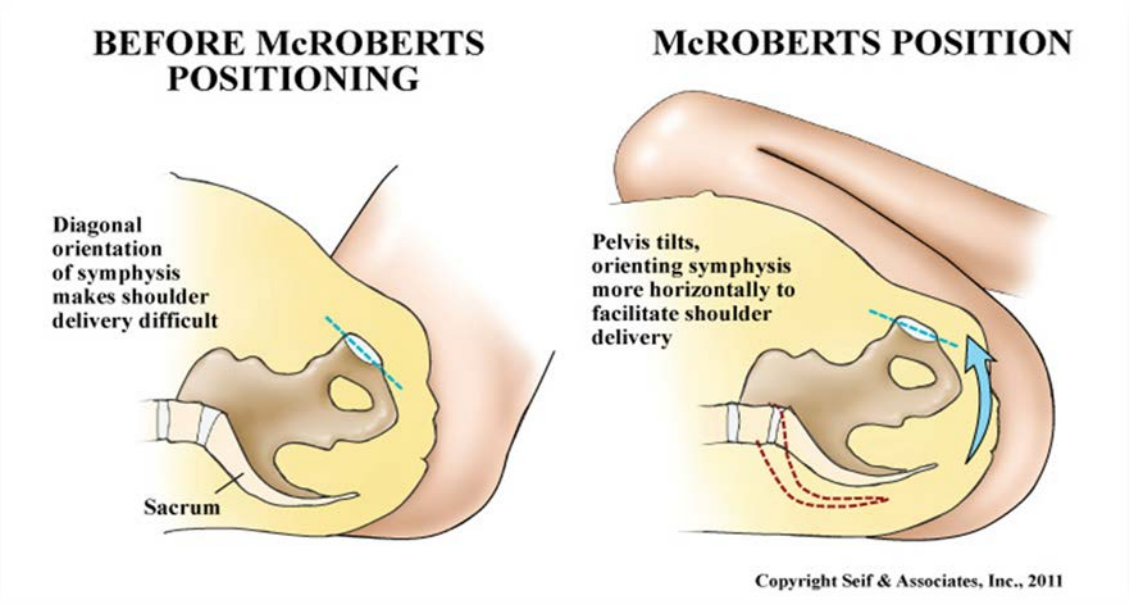
The order in which these maneuvers are used is based on the obstetrician's experience and the condition of the patient. It is important that the team spend no more than 30 seconds on each maneuver before moving to the next.

McRoberts' Maneuver

The McRoberts' maneuver is recommended by ACOG as the first maneuver to be attempted when shoulder dystocia occurs.

The McRoberts' maneuver is an extremely effective maneuver that can be used to increase the diameter of the pelvis. It is the most widely used maneuver for shoulder dystocia and is often the only maneuver needed to resolve shoulder dystocia.

In this maneuver, two assistants are needed to hyperflex the mother's legs onto her abdomen. This movement flattens the sacrum and changes the angle of the symphysis pubis in relation to the baby's anterior shoulder, often freeing the fetal shoulder (Cohen & Friedman, 2011).

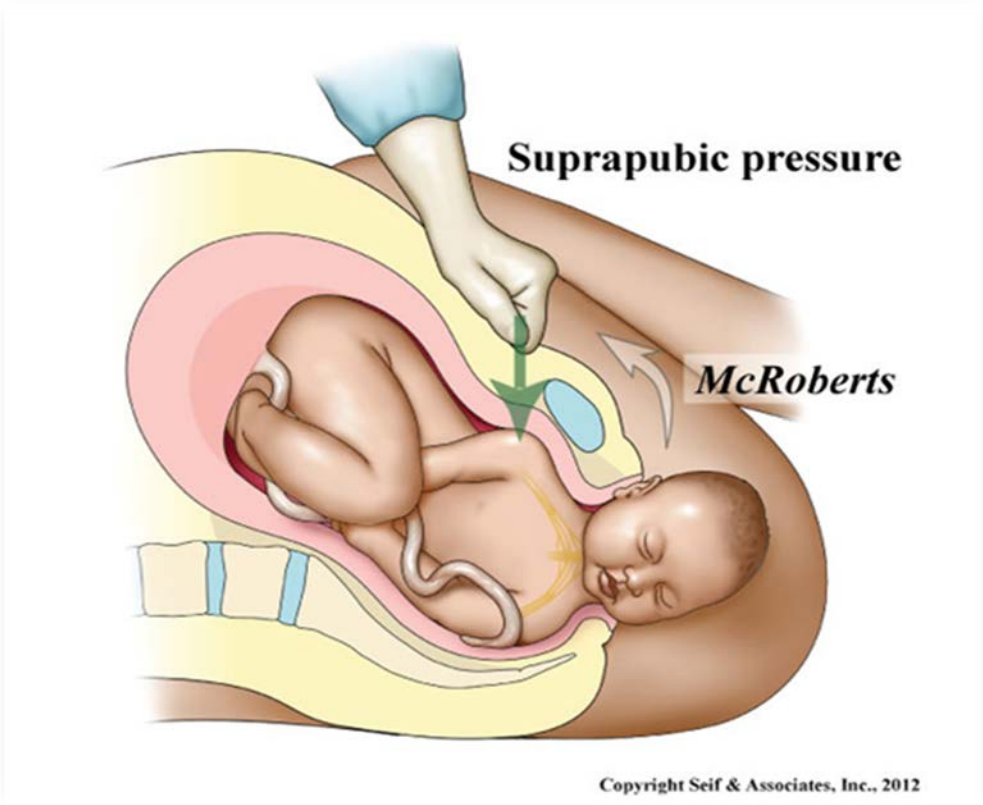


Note!

- The McRoberts' maneuver straightens the maternal sacrum relative to the lumbar spine, and increases the angle of inclination between the symphysis pubis and the sacral promontory (Cohen & Friedman, 2011).

Suprapubic Pressure

In this maneuver, the labor nurse places direct pressure with an open hand or fist just above the mother's symphysis pubis. The pressure can be directed straight down or to the left or right. Wherever it is directed, the aim of the pressure is to push the baby's anterior shoulder out of its position behind the mother's pubic bone.



Suprapubic pressure can be applied above the symphysis pubis, over the fetus' anterior shoulder, to assist the infant in adducting the arms closer to the body and releasing the impacted shoulder. This pressure should not be applied for more than 30 seconds. If this procedure fails after 30 seconds, the next procedure should be immediately attempted.

When used in conjunction with McRoberts' maneuver, suprapubic pressure helps to free the shoulders from the pelvis bone. Suprapubic pressure can also be used to sweep the shoulder externally into an oblique position in the pelvis that allows for delivery (Cohen & Friedman, 2011).

Take care to be sure your hands are in the correct position as incorrect hand placement can delay the birth, rupture the uterus or cause the shoulder to become further impacted (Cohen & Friedman, 2011).

Test Your Knowledge

Suprapubic pressure should be applied for no longer than:

A. 10 seconds
B. 30 seconds
C. 1 minute
D. 2 minutes

Rationale: Suprapubic pressure can be applied above the symphysis pubis, over the fetus' anterior shoulder, to assist the infant in adducting the arms closer to the body and releasing the impacted shoulder. This pressure should not be applied for more than 30 seconds. If this procedure fails after 30 seconds, the next procedure should be immediately attempted.

Rubin II Maneuver

If the shoulders are not released with McRoberts' maneuver and suprapubic pressure, the clinician may try to rotate the shoulders, using the Rubin maneuver.

In this maneuver, one hand supports the infant's head, while the other hand is inserted in the birth canal posteriorly or anteriorly, on the dorsal aspect of the fetal shoulder. The shoulder is then rotated inward (adduction) so that the shoulders come to lie in the oblique diameter of the pelvis. By applying pressure to the dorsal aspect of the shoulder, the rotation itself adducts the fetal shoulders, thereby reducing their bisacromial diameter (Cohen & Friedman, 2011).

Rubin II Maneuver. Image provided courtesy of M. Salmon (2013).

Note!

• Note that it is never proper to pull on the shoulders simultaneously.

Test Your Knowledge

The main purpose of Rubin's maneuver is to:

A. Deliver the posterior arm
B. Loosen the fetal shoulders to facilitate descent
C. Rotate the shoulders into the oblique diameter of the pelvis
D. Deliver the anterior arm

Rationale: Rubin maneuver. In this maneuver, one hand supports the infant's head, while the other hand is inserted in the birth canal posteriorly or anteriorly, on the dorsal aspect of the fetal shoulder. The shoulder is then rotated inward (adduction) so that the shoulders come to lie in the oblique diameter of the pelvis. By applying pressure to the dorsal aspect of the shoulder, the rotation itself adducts the fetal shoulders, thereby reducing their bisacromial diameter

Woods Screw Maneuver

Woods' screw maneuver involves pushing on the posterior surface of the posterior shoulder in a corkscrew fashion to release the opposite impacted anterior shoulder. This leads to turning the anterior shoulder to the posterior and vice versa. This maneuver is somewhat the opposite of Rubin II maneuver. In addition to the corkscrew effect, pressure on the posterior shoulder has the advantage of flexing the shoulders across the chest. This decreases the distance between the shoulders, thus decreasing the dimension that must fit through the pelvis (Cohen & Friedman, 2011).

Delivery of Posterior Arm

Another maneuver that can be useful is the removal of the posterior arm. Most likely, the infant has his/her arms alongside or across the chest. The nurse should place her/his hand in the vagina at the six o'clock position and follow the arm past the elbow to find the infant's hand. Grasping the hand, the arm can be moved gently in a sweeping motion toward the center of the body with the hand passing over the head as it exits the vagina.

Image provided courtesy of Breastfeedinc.com (2013).

The whole arm will be delivered. Then the infant can be turned by using the Rubin maneuver again. Most likely the infant will come easily in conjunction with mother's pushing (Cohen & Friedman, 2011).

Zavanelli Maneuver

This maneuver should be attempted ***only when all other efforts have failed***. Although case reports have described successful use of this maneuver, there also have been reports of fetal death, fractured spines, and other severe fetal damage (Cohen & Friedman, 2011).

Moving Between Maneuvers

It is important for the clinician to recognize when a maneuver is not working, and to move quickly to the next maneuver. It is also more critical that the steps be employed efficiently, rather than in any specified order. Up to thirty seconds is recommended as the appropriate amount of time to spend on each maneuver (Gobbo et al., 2012). Although 3-5 minutes may seem like a brief window of time in which to act, it is adequate to conduct all the maneuvers.

Each of these maneuvers is designed to do one of three things:

1. Increase the functional size of the bony pelvis
2. Decrease the bisacromial diameter (width of the presenting shoulders)
3. Change the relationship of the shoulders-bisacromial diameter within the bony pelvis (Gobbo et al., 2012)

Shoulder Dystocia: Injuries

Brachial Plexus Injury

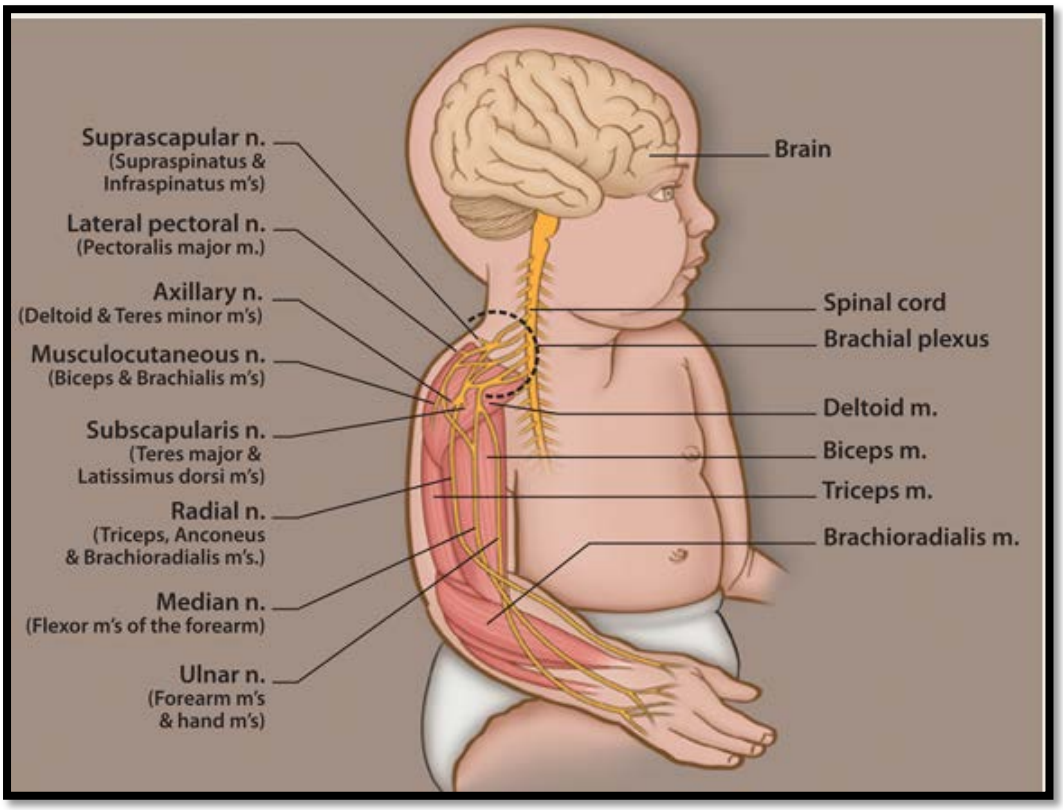
The brachial plexus is the major bundle of nerves that begins at the base of the neck and runs through the shoulder, arm, and hand. Shoulder dystocia can result in a major disruption in oxygen transfer, resulting in impaired neurological development.

In addition, shoulder dystocia can cause birth trauma. Brachial plexus palsies are among the most common and worrisome complications of shoulder dystocia and occur in 7-20% of infants whose deliveries were diagnosed with a shoulder dystocia. While nearly all infants recover within 6-12 months, 1-2% will be left with a permanent and disabling injury (Gobbo et al., 2012).

Note!

- The nurse plays a vital role in reassuring the parents during the difficult delivery, by providing simple explanations as the delivery progresses.

Brachial Nerve Plexus



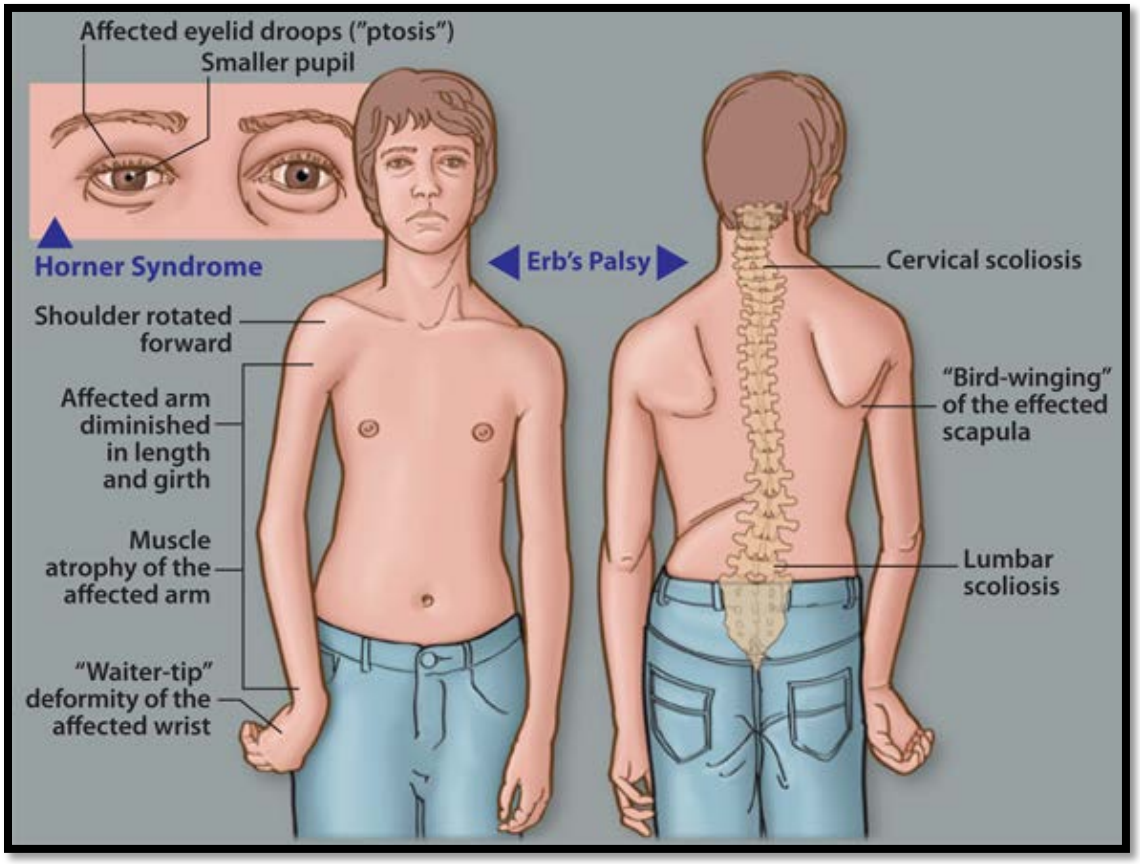
The Brachial Nerve Plexus. Image used with permission from birthinjury.org (2013). www.birthinjury.org.

Types of Brachial Nerve Injuries

Nerve palsies are named by the level of spinal involvement. A combination of injuries and scar tissue development impact the optimal recovery and use of the affected arm. Avulsion (forcible detachment) of nerve roots produces the most severe deformities.

Three types of brachial nerve injury are generally described:

1. **Erb's Palsy**: Most common, involves C5 to C6 nerve roots
2. **Klumpke's Palsy**: Involves C8 to T1 nerve roots
3. **Horner Syndrome**: Presents with a dropping eyelid on the affected side



Presentation of an Erb's Palsy Injury. Image used with permission from birthinjury.org (2013). www.birthinjury.org

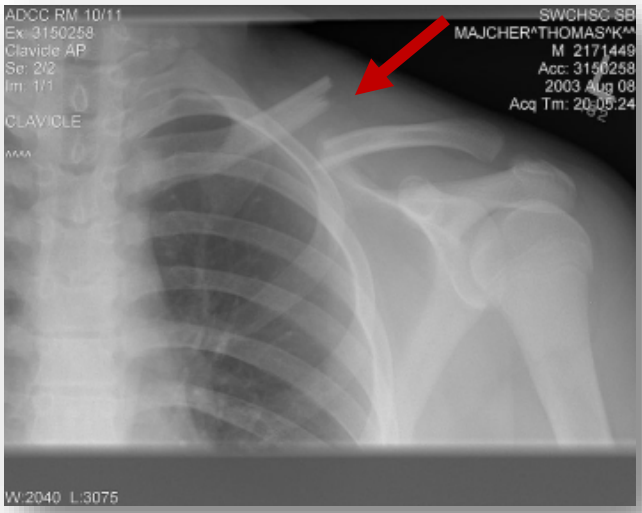
Resolution of Brachial Plexus Nerve Injuries

Mild injuries usually resolve by three months of age, with no residual effect. It's impossible to predict or diagnose the prognosis in the newborn period. A physical therapist needs to be consulted promptly, and exercises must be initiated in the early postpartum period. Frequent follow-up with a physical therapist and pediatric neurologist for evaluation of continuing weakness or movement problems is recommended.

Since most infants are born in the left occiput anterior position, the injury is most commonly found in the anterior shoulder. It's also possible to have a left-sided injury due to posterior arm impaction on the sacral promontory of the pelvis. Occasionally, both sides have been affected.

Clavicular and Humeral Fracture

The second most common injury to infants following shoulder dystocia deliveries is a fractured clavicle.



Clavicular Fracture. Wikipedia (2013).

When the fetal shoulders are relatively large in relation to the maternal pelvis, significant pressure may be placed on them as they pass through the birth canal. In some cases, this pressure may cause the clavicle to fracture. The overlapping of the ends of the broken clavicle reduces the diameter of the fetal chest and intra-shoulder distance and allows them to be delivered. This fracturing may in fact help reduce the incidence of severe brachial plexus injury .

Choosing a Mode of Delivery

Risk factors for shoulder dystocia must be carefully considered prior to deciding upon a mode of delivery. The clinician must determine whether the risk of shoulder dystocia is high enough to outweigh the maternal risks of an elective cesarean section.

When Is Cesarean Section Warranted?

In deciding the answer to this question, the clinician must consider the inherent risks of cesarean section:

1. Excessive bleeding
2. Infection
3. Injury to bowel or bladder
4. Deep venous thrombosis
5. Need for hysterectomy

These adverse events occur much more frequently than permanent brachial plexus injury and the risks of surgery are even higher.

Addressing Maternal Concerns

Often a mother will voice concern about whether she will be able to deliver her baby safely vaginally. She may feel that her infant is too big, that she is too small, or that her obesity will make her delivery more difficult.

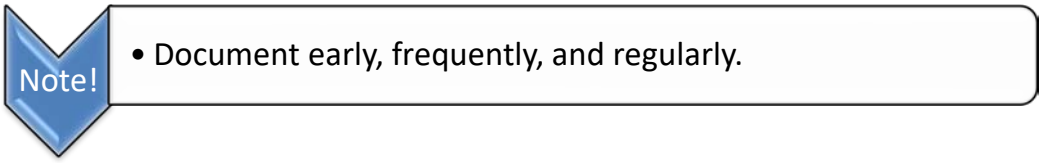
Review her risk factors and discuss the specific risks of injury to her baby should dystocia arise including the need and risks for a cesarean delivery.

Documentation

Documentation is an important component of the delivery process.

At minimum, the following should be recorded:

- How shoulder dystocia was diagnosed
- Which shoulder was anterior, and which was posterior
- A description of the force applied initially and in subsequent traction attempts, using descriptive terminology, such as “mild,” “moderate,” or “significant”
- The maneuvers performed and approximate length of time each maneuver was tried
- The condition of the baby at delivery, including Apgar scores, a description of all injuries, and cord pH, if obtained
- The time from delivery of the fetal head to delivery of the body
- Documentation of the discussion with the patient following delivery



Using Mnemonics

Although there is no regimented sequence of maneuvers, there are a few mnemonics suggested in the literature that can assist labor nurses in managing shoulder dystocia:

HELPER

The *HELPER* mnemonic is advocated by the American Academy of Family Physicians:

H: Call for help. This step refers to activating the pre-arranged plan for personnel to respond with necessary equipment to the labor and delivery unit.

E: Consider an episiotomy: If there is limited room for the insertion of the clinician’s hand in the vagina to perform the necessary maneuvers. Since shoulder dystocia is a bony impaction, simply performing an episiotomy will not cause the shoulder to release but will allow additional room for the clinician to perform the necessary maneuvers

L: Elevate the legs (McRoberts’ maneuver): This is the first step in management of shoulder dystocia. When this maneuver is successful, normal traction will be sufficient to deliver the fetus. Delivery should be attempted in this position for approximately 30 seconds. McRoberts’ maneuver alone is believed to relieve more than 40% of all shoulder dystocias. Combined with suprapubic pressure and/or episiotomy, over 50% of dystocias can be delivered by McRoberts’ maneuver

P: **Provide suprapubic pressure**

E: **Enter maneuvers** (Rubin and Woods)

R: **Remove posterior arm**

BE CALM

Be Calm mnemonic:

B: Breathe, do not push. Encourage the woman to breathe or even pant in order not to push.

E: **Elevate** the legs into a McRoberts' position.

C: **Call** for help.

A: Apply suprapubic pressure (NOT fundal pressure).

L: **Enlarge** the vaginal opening with an episiotomy when additional hand room is needed.

M: **Maneuvers** (e.g., McRoberts', Rubin, or Woods)

Conclusion

Shoulder dystocia can be a frightening and unpredictable obstetrical emergency. Obstetricians, nurse-midwives, and labor nurses have a professional obligation to maintain current knowledge of shoulder dystocia and be comfortable performing maneuvers to deliver the shoulder safely.

As a responsible healthcare professional, you should be familiar with the risk factors for shoulder dystocia, be able to rapidly identify the presence of a shoulder dystocia, assist with the application of appropriate maneuvers, and consider alternatives to vaginal delivery in an emergent situation.

Understanding how shoulder dystocias can occur, recognizing shoulder dystocia, and having a pre-established plan of care for managing shoulder dystocia will assist the delivery team in providing safe, competent, and effective care.

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