

Maternal 911 in Action: Shoulder Dystocia

"Healthcare organizations should find ways to adapt to the learning tools or initiatives used in high reliability organizations following safety incidents. It is challenging to recommend any specific one as all learning tools have shown considerable promise. However, the way these tools or initiatives are implemented is critical, and so further work is needed to explore how to successfully embed them into healthcare organizations so that everyone at every level of the organization embraces them" (Serou, et al., 2021).

Is something about to happen?

The objective of 911 in Action is to put real-life events in to practice with the management of each step prior to an actual event. This is not a test of individuals, but a tool to identify and potentially fix gaps within the unit, teamwork, communication and overall reliability.

Every healthcare scenario is to be as realistic as possible and involve the members of the team that would be present during an actual event.

A 911 in Action drill should be practiced in a room consistent with where an actual event would occur. This will make the drill efficient in getting the participants familiar with the room set-up, equipment location, medication available, and may identify improvements in their location for faster retrieval in a real event.

911 in Action is to be as hands-on as possible.

Following the practice event, the team should discuss; what went well, what could be improved, what needs to be changed regarding equipment and supply location, and questions answered so each member has a clear understanding of the event and management.

Maternal 911 in Action Steps to Preparedness

- a. The drill should be as realistic as possible even consider a colleague simulating a family member.
- b. The drill should meet department/unit needs and practices using current evidence-based practice.
- c. Those who attend should be the team members who would provide care during an actual event.
- d. Explanation of the process should be understood prior to initiation of the action; provide a case scenario, participants understand their role is to respond as would be done during an actual event, and patient outcome will be based upon their actions.
- e. The trainer will provide scenario outcome in events as the participants work through the drill and redirect as appropriate.
- f. All procedure performances will be demonstrated, through discussion, so the team will be aware of the time and supplies needed for successful completion.

- g. Following the event, the team will discuss the process. Debriefing provides a powerful and essential structure for maintaining the capacity to learn. The team will be able to evaluate what worked well and where improvements can be made. This may include addition or removal of equipment, supplies, medication, etc.
- h. Repeating the drill may be necessary until all members are functioning proficiently within his/her scope of practice.

Serou, N., Sahota, L. M., Husband, A. K., Forrest, S. P., Slight, R. D., & Slight, S. P. (2021). Learning from safety incidents in high-reliability organizations: a systematic review of learning tools that could be adapted and used in healthcare. *International Journal for Quality in Health Care*, 33(1).

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Maternal 911 Education Systems, LLC

475 West Center St.

Ithaca, MI 48847

www.maternal911.com

Maternal 911 in Action

Case Scenario to Post

Shoulder Dystocia

Dee, a 22-year-old primigravid woman at 40 weeks 3 days gestation is having induction of labor (IOL). She is 5 feet (60 inches) tall and weighs 187 pounds (85 kg) with a BMI of 36.5. She has progressed to full dilation. You are asked to evaluate her after 3.25 hours in the second stage of labor. Your examination identifies the fetus in a vertex presentation, with caput, LOA position with the head on the pelvic floor. Reassuring fetal status is present per external fetal monitoring (EFM). The woman states she is so exhausted. You recommend a vacuum extraction, which she acknowledges understanding and acceptance giving her informed consent. You confirm she had signed the consent from the office at 36 weeks for operative vaginal birth. After the vacuum-assistance occurs, the fetal head is tight against the perineum with no restitution. The time is 1001.



Supplies:

- Printed cases (with answers) for the trainer
- Print copies of the shoulder dystocia maneuvers at the end of this document to distribute to the team (each person learns and remembers differently, so options are available to improve recall)
- Pelvic model
- Fetal doll
- Vacuum extractor or Forceps (optional)

Trainer's Form

Maternal 911 in Action Case Scenario

Shoulder Dystocia

Announce: The objective of 911 in Action is to put real-life events in to practice with the management of each step prior to an actual event. This is not a test of individuals, but a tool to identify and potentially fix gaps within the unit, teamwork, communication and overall reliability.

Dee, a 22-year-old primigravid woman at 40 weeks 3 days gestation is having her labor induced. She is 5 feet (60 inches) tall and weighs 187 pounds (85 kilograms) with a BMI of 36.5.

She has progressed to full dilation. You are asked to evaluate her after 3.25 hours in the second stage of labor. Your examination identifies the fetus in a vertex presentation, with caput, LOA (left occiput anterior) position with the head on the pelvic floor. Reassuring fetal status is present per external fetal monitoring (EFM). The woman states she is so exhausted. You recommend a vacuum extraction, which she acknowledges understanding and acceptance giving her informed consent. You confirm she had signed the consent from the office at 36 weeks. After the vacuum-assistance occurs, the fetal head is delivered and tight against the perineum with no restitution. The time is 1001.

Family member: Why did the head do that? Why isn't the baby coming? Is it stuck? What are you going to do? GET THE BABY OUT!

911 in Action	Discussion
<p>Call for assistance; ask for help, as you recognize the possibility of a shoulder dystocia. Have a pediatric provider called to the room. A second obstetrician may be summoned. Have the anesthesia provider and surgical crew notified of a possible stat cesarean delivery. Additional nursing staff will be needed to assist.</p>	<p>Upon recognition of shoulder dystocia, you realize any delay in delivery could result in fetal asphyxia.</p>
<p>Ask the woman to stop her pushing efforts.</p>	<p>It is important to immediately ask the woman to stop her pushing efforts until maneuvers to relieve the impacted shoulder are carried out. The shoulder may further impact with her continued pushing.</p>
<p>McRobert's maneuver is initiated: hyperflexion of the maternal thighs onto her abdomen.</p>	<p>Steps to be demonstrated by the team. Observe: No pulling on the fetal head. No pushing on the maternal abdomen (no fundal pressure). Coordinated team approach. All focused on a common purpose which is to relieve the impacted shoulder</p>
<p>The nurse should apply suprapubic pressure to help resolve anterior fetal shoulder impaction.</p>	<p>Suprapubic pressure is applied with the heel of clasped hands from the posterior aspect of the anterior shoulder towards the fetal nose to cave the fetal shoulder girdle, this will help to dislodge the shoulder (Mazzanti maneuver). Applies a steady pressure first and, if unsuccessful, applies a rocking pressure. Do NOT use fundal pressure.</p>
<p>Consider an episiotomy.</p>	<p>Episiotomy is used when necessary to facilitate operative maneuvers by creating more room for the healthcare provider's hand. Team members recognize an episiotomy by itself will not dislodge an impacted shoulder.</p>

1001 the shoulders remain impacted.

Family member: Push on her belly or reach your hand up in there and get this baby out. Do something or the baby is going to die!! Why aren't you doing anything? MAKE HER PUSH!!

911 in Action	Discussion
Manual removal of the posterior arm (swimmers move)	Observe the humerus is splinted and swept over the fetal chest to minimize the risk of fracture. If time allows, a foley catheter could be threaded through the fetal armpit, pressure applied to both ends to help flex the fetal arm across the fetal chest for delivery of this arm and resolve the shoulder dystocia.
Rotation of the posterior should to the anterior position (Wood's maneuver).	Team member demonstrates or describes the technique.

1002 Dee is crying and asks why her baby is not born. The shoulders are still not delivered.

Family member: GET THIS BABY OUT OR YOU'RE GOING TO KILL HER TOO!

911 in Action	Discussion
Team members have Dee focus and explain what is happening.	Ask the participants how they would handle this situation and what would you say to the couple?
Assist Dee to roll over on all fours (hands and knees) to facilitate the delivery.	Depending on the response to maneuvers, this may be considered at this time or earlier in management.

1007 a baby is born. After stimulation and suctioning he begins to cry vigorously. Apgar scores 9¹ and 9⁵



After the Maternal 911 in Action drill, debrief with the following:

After the shoulder dystocia has been resolved and the infant delivered, the trainer will ask the following:

1. What are the risk factors for shoulder dystocia for you to communicate and have the team working prepared to help during the delivery? (See FREDA'S HELP at end for risk factors)
2. What will occur next?
 - a. Inspection of the vagina, cervix, and perineum for lacerations/trauma.
 - b. Inspect the newborn for trauma.
 - c. Fracture of the clavicle or humerus
 - d. Erb's palsy
 - e. Cervical spine injury
3. Discuss the importance of documenting the time of
 - a. Head delivery
 - b. Body delivery
 - c. Identification of the anterior shoulder, fetal right or left
 - d. Discuss with the patient and her family
 - e. Documentation of the event with details of times with body parts (a-c)

After the Maternal 911 in Action drill, the trainer will lead the team through the debriefing process.

1. What went well for the team? 2
2. What did we learn through this drill?
3. What would we do differently in a real-life situation?
4. Did we have any issues; equipment, processes, communication, understanding?
5. Who is going to follow-up to resolve the problems and/or contact those who need to assist in making changes?
6. What time frame will be allowed for completion of this project?
7. How will changes be communicated to the team?



Hi, I'm Freda. I am hoping my name will help you remember maneuvers!

Shoulder Dystocia Maneuvers

The maneuvers to assist in resolution of a shoulder dystocia are taught with **FREDA'S HELP**.

F - Flex the maternal hips or McRobert's maneuver

R - Rotate the posterior fetal shoulder

E - evaluate for an **E**pisiotomy

D - Deliver the posterior shoulder (swimmer's move)

A - move her into **A**ll fours

S - have **S**uprapubic pressure applied with each maneuver

S - **S**houlder shrug maneuver may be considered

HELP - call for help once the shoulder dystocia is

recognized and have help when risk factors are present.



**First,
call for
HELP!**

RISK FACTORS FOR SHOULDER DYSTOCIA

- ❖ History of delivering another child with shoulder dystocia; about 10% will have recurrence
- ❖ History of prior macrosomia newborn or suspected macrosomia in current pregnancy
- ❖ Diabetes
- ❖ Short stature
- ❖ Maternal obesity
- ❖ Multiparity
- ❖ Advanced maternal age
- ❖ Maternal pelvic shape/size
- ❖ Excessive maternal weight gain
- ❖ Male fetus
- ❖ Dysfunctional labor pattern
- ❖ Fetal malposition
- ❖ Operative vaginal delivery
- ❖ Labor induction
- ❖ Epidural analgesia

Please visit our website for this pictorial at maternal911.com

HELP! A SHOULDER DYSTOCIA IS OCCURRING!



The more common maneuver's to assist in resolution of a shoulder dystocia.

Maternal 911 in Action

1 CALL FOR HELP

Call for help so others can assist with tasks to resolve the shoulder dystocia. If a surgery team is not readily available at your facility, call them to arrive ASAP.



2 FLEX THE HIPS (MCROBERT'S)

Flexing the hips onto the abdomen can shift the pelvis and allow the fetal shoulder to disimpact. Hips typically remain flexed with each maneuver.

3 SUPRAPUBIC PRESSURE

Pushing at the suprapubic area, towards the fetal nose, can help rotate the fetal shoulders and release the impacted fetal shoulder. This can be repeated with each maneuver.



4 DELIVERY OF THE POSTER ARM

Delivering the posterior arm can release an impacted anterior fetal shoulder. Some call this the swimmer's move. To deliver, the arm should be flexed across the fetal abdomen. If time allows, a foley catheter could be fed under the fetal arm pit, then with gentle traction across the fetal chest to deliver this posterior arm.



5 ROTATE THE POSTERIOR SHOULDER

Applying pressure to the posterior fetal shoulder, carving in the shoulder girth, can rotate the fetus enough to disimpact the anterior fetal shoulder.

6 ROTATE THE ANTERIOR SHOULDER

The anterior fetal shoulder can have pressure applied to help rotate it out from under the pubic symphysis. Typically rotating towards the fetal nose has the best results, but the opposite pressure has also helped, just not as common. During this emergency, if one doesn't work, try the other.



7 EVALUATE FOR AN EPISIOTOMY

The episiotomy alone would not resolve a shoulder dystocia, but if more room is needed to perform the maneuvers it may be warranted.



8 SHOULDER SHRUG MANEUVER

The shoulder shrug technique involves shrugging the posterior shoulder and rotating the head-shoulder unit 180 degrees to resolve the shoulder dystocia.



9 ALL FOURS (GASKIN'S)

Moving the mother into all fours position may shift the pelvis and fetus allowing the shoulder dystocia to be resolved and the delivery to be accomplished.



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Ithaca, MI 48847

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