

Shoulder Dystocia following Vacuum-Assisted Delivery

Rating Levels:

- 1 – Team meets all criteria
- 2 – Team meets criteria with minimal prompting
- 3 – Team requires retraining to meet criteria

Rating Team Competency Criteria:

OVERVIEW

The care team will:

- 1) Listen to the initial **scenario** presented by the group facilitator
- 2) Hold a **briefing** session to discuss risk factors and roles after the facilitator presents the initial case (limit to five minutes)
- 3) Simulate patient care management (**teamwork in action**). The facilitator intervenes as little as possible. (limit to 30 minutes)
- 4) Participate in a structured **debriefing** lead by the facilitator. (approximately one hour)

Videotape to playback sections during debriefing if possible.

INITIAL SCENARIO

"You are taking care of a 23 year old G1P0 at 40 weeks, six days by LMP consistent with an 18 week ultrasound. Her prenatal course was unremarkable with a one hour GTT 78. At her last clinic visit yesterday, the EFW was 3000 gms. She was admitted at 4 cm with regular contractions eight hours ago and has since received an epidural. She was augmented with pitocin after her epidural and is now 9 cm. Does this patient have any risk factors for a shoulder dystocia? What other risk factors would you look for in your patients?"

Brief: Identifies Risk Factors

- Maternal
 - Abnormal pelvic anatomy
 - Gestational diabetes – check prenatal records for GTT results
 - Post-dates pregnancy
 - Previous shoulder dystocia
 - Short stature
- Fetal
 - Suspected macrosomia (EFW > 4000gms)
- Intrapartum
 - Assisted vaginal deliveries
 - Protracted active phase, first stage
 - Protracted second stage

"Approximately what percentage of shoulder dystocias occur in the presence of these identified risk factors?"

50 percent of shoulder dystocias occur **WITHOUT** risk factors!

"Name some actions you will take to prepare for a shoulder dystocia."

Brief: Prepares for a shoulder dystocia

- Ensures adequate staffing for delivery (whenever feasible, have two nurses present for delivery)
- Maintains bed in low position or have step stool available
- Assesses for bladder distention
 - Encourage regular voiding during active labor
 - Catheterize as necessary
- Observes for "turtle sign"

"Is there any other team preparation you want to discuss in your briefing session?"

Brief checklist: Team preparation (list below for discussion during debriefing)

- Who is on core team? Ensures adequate staffing for delivery (whenever feasible, have two nurses present for delivery)
- All members understand and agree upon goals?
- Roles and responsibilities understood?
- Plan of care?
- Staff availability?
- Workload?
- Available resources?

TEAMWORK IN ACTION

Facilitator now observes the team in action to evaluate their performance with as little interaction as possible.

Facilitator throws in challenges: significant other passes out or objects to needed intervention, magnesium not available, bed unplugged, language barrier ...

"The patient progressed and pushed for three hours. The fetal strip has shown variable decelerations with pushing but has been overall reassuring with moderate variability and normal baseline rate of 150."

You have counseled the patient on the risks, benefits, alternatives, and probability of success, and she agrees to attempt a vacuum-assisted delivery. Use the acronym ABCDEFGHIJ to help you in this delivery."

Teamwork in action: Performs vacuum extraction

- A** Ask for help, Address the Patient, and is Anesthesia adequate?
- B** Bladder empty
- C** Cervix must be completely dilated
- D** Determine position and think shoulder dystocia
 - "You examine the patient to find the fetus at +3 station and occiput posterior position"
- E** Equipment and Extractor ready

- F** Apply the cup over the sagittal suture and in relation to the posterior Fontanel. Member of the team notes the time (20 minutes total application time recommended)
- G** Gentle Traction
- H** Halt traction when contraction is over (reduce pressure to 10) Halt the procedure if three pop-offs or three pulls with no progress
- I** Evaluate for Incision for episiotomy when the head is being delivered
- J** Remove the vacuum cup when the Jaw is reachable

"After the head has delivered, you are unable to deliver the shoulders. Because you identified risk factors (assisted vaginal delivery), two nurses are at the bedside. Assist the patient with her delivery." (Facilitator note: If a pelvic model or manikin is used, demonstrate the turtle sign with the fetus and continue the cascade of persistent dystocia until all the steps are completed.)

Teamwork in action: Organizes the team

- Person at the perineum calls for help and gives directions to the team
- Team members anticipate steps of **HELPER-R**
- Team members anticipate possible neonatal resuscitation
- Team initiates emergency notifications per unit policy (insert your facility's emergency notification process here):

Teamwork in action: Demonstrates **HELPER-R mnemonic**

- H – Help!** Calls for additional assistance
- E – Evaluates for episiotomy**
- L – Legs** Demonstrates McRoberts Maneuver
- P – Pressure** Demonstrates Suprapubic Pressure (person on the side of the fetal back)
- E – Enters the vagina**
 - Demonstrates Rubin Maneuver
 - Demonstrates Woodscrew Maneuver
 - Demonstrates Reverse Woodscrew Maneuver
- R – Removes the posterior arm**
- R – Rolls the patient**
 - Demonstrates Gaskin Maneuver (hands and knees)

Teamwork in action – core tools:

- Huddle** (for critical issues and emerging events)
- Situation Monitoring:** STEP (Status of patient; Team members; Environment; Progress towards goal)
- Shared Mental Model**
- SBAR** (Situation; Background; Assessment; Recommendation)
- Check back** (closed loop communication)

Teamwork in action teamwork – other appropriate tools:

- Cross monitoring (monitoring actions of other team members)

- Feedback (Timely; Respectful; Specific; Directed toward improvement; Considerate)
- Advocacy and assertion (Advocate for patient; Assert corrective action in firm and respectful manner)
- Two-challenge rule for informational conflict; Anyone can “stop the line” after concern voiced twice
- CUS (I’m Concerned; I’m Uncomfortable; This is a Safety issue)
- DESC script for personal conflict (Describe; Express; Suggest; Consequences)
- I’M SAFE checklist (Illness; Medication; Stress; Alcohol and Drugs; Fatigue; Eating and elimination)
- Collaboration (Win/win; commitment to common mission)
- Call out (for critical information)

“Your patient is delivered and the neonate is stable, after requiring brief PPV and free-flow oxygen. What complications will you assess for in the mother and infant?”

Teamwork in action content: Assesses possible maternal complications

- Third or fourth degree perineal laceration
- Postpartum hemorrhage

Teamwork in action content: Assesses possible neonatal complications

- Brachial plexus injury (temporary or permanent)
- Clavicle fracture
- Hypoxic brain injury (Obtains cord blood gases)
- Death

“When and how will you discuss the emergency with the family?”

Discusses effective communication with patient and family members

“Tell me about what you will document and what forms are needed in your facility for adequate documentation (including applicable policies).”

Discusses adequate documentation

- Includes time spent on each maneuver
- Includes time from head out to full body delivery

DEBRIEFING

Debriefing session should now be led by facilitator. Television and monitor should be available for review of briefing and teamwork in action as indicated. Debriefing should be videotaped for viewing by those who could not attend.

Facilitator should categorize responses on three flip chart papers taped to wall labeled “medical management”, “teamwork” and “performance improvement (systems issues)”. If discussion of one area is lacking, the facilitator should guide discussion to that area.

Briefing and team management should be discussed.

Plans should be made for addressing key problems identified.

Debriefing

- What went well and why?
- What could have gone better and why?
- What would you do differently?

Follow Up:

- Communication clear?
- Roles and responsibilities understood?
- Situation awareness maintained?
- Workload distribution?
- Did we ask for or offer assistance?
- Were errors made or avoided?
- Did our team have a shared and understood plan of care?

FINAL REVIEW

Facilitator now discusses team performance during the drill, reviewing points of success and recommendations for improvement.

Date: _____

Observer: _____ Title: _____

Participants:

Summary of Training:

Competency Validated (circle one) YES NO

If no, discuss the areas of concern and repeat the scenario and document below

Competency Validated following remediation YES NO

If no, unit leaders must be informed so re-education and training can be addressed