Shoulder Dystocia

Part 1: Identification, prediction, maneuvers

What qualifies something as a “shoulder dystocia”? What does that actually mean?

What defines a shoulder dystocia?

- Inability for the shoulders to deliver spontaneously after the head
- Failure to deliver the shoulders with spontaneous pushing efforts
- Need for interventions to deliver shoulders beyond gentle downward traction
- >1 minute of interval time between the shoulders **

Risk Factors for Shoulder Dystocia

What conditions are associated with a higher rate of shoulder dystocia (and what are their limitations)?

- Macrosomia (suspected currently or in a previous pregnancy)
- Shoulder dystocia with previous delivery
- Gestational diabetes
- Maternal obesity
- Large weight gain in pregancy
- Post term
- Induction
- Multiparity
- Advanced maternal age
- Prolonged first and/or second stage of labor
- Augmented labor (either natural measures or allopathic measures)
- Operative or assisted vaginal delivery*

Discussion!

- Can we predict a shoulder dystocia?
- What's the difference between correlation and causation?
- Is there a best practice approach when it comes to prevention?

What are the warning signs in labor?

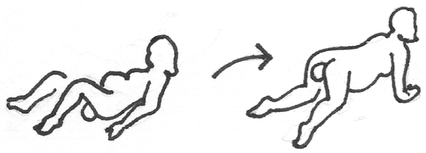
SD Warning Signs

- Protracted 1st stage of labor (What was the labor pattern like? Did it require augmentation to keep it going or to make progress? Was it different from the birthing parent's previous labor patterns?)
- Protracted 2nd stage of labor (Irregular or abnormal contraction pattern in 2nd stage, Was it longer than the birthing parent's previous second stage?)
- Slow crowning
- "Turtle Sign" (Head recoils against the perineum)
- Slow or no delivery of chin
- No spontaneous restitution or rotation
- Failure of the shoulders to descend spontaneously (or with pushing)
- Darkening of fetal scalp or fetal head (dusky color)
- Head wiggling/moving on perineum after delivery**
- FHT decelerations at end of second stage (tolerance)**
- Birthing parent reports difficulty pushing, "this feels different", or "baby's going back in"

Basic SD Maneuvers

Flip

F



Gaskin's

Flip the mom over

Over to Gaskin's The movement is the point here.

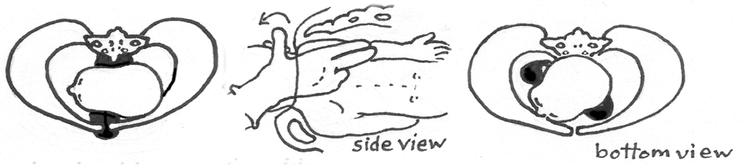
L

Running Start

Lift the leg(s)

On H & Ks, lift Rt. leg , or, if known, the leg on side of baby's back.

O



Rotate the shoulder into the **Oblique**

Posterior arm is easier to move.

P

Bring out the **Posterior** arm

Bend elbow first. If needed, rotate baby and repeat.

Basic Maneuvers

- Open the pelvic outlet (position changes)
    - If squatting, stand, lunge, or change positions
    - “Gaskin Maneuver” (Hands and Knees + Back arched)
    - McRoberts
    - Runner’s Start
    - “Pumping legs”
- Encourage shoulder rotation
    - “Wood’s Screw” maneuver
    - Rubin’s Maneuver (downward and upward traction to “wiggle” shoulders free
    - Catheter to force rotate the shoulders**
- Other hands-on maneuvers
    - Rubin’s Maneuver (downward and upward traction to “wiggle” shoulders free
    - Suprapubic pressure (in McRoberts)
    - Deliver posterior arm

What about pushing? When does it help? When does it hurt?

- Active pushing can both help or inhibit descent - if the shoulders are pushing against the pubic bone, no amount of force is going to get that baby out

- The priority is *rotation*

- Once baby's shoulders are rotated and no longer pushing against the pubic bone, the birthing parent can assist delivery by pushing as you perform gentle, downward traction to release the shoulders

    - Do **not** push during the following maneuvers: Wood's Screw, Rubin's (until the shoulders are in place), delivering the posterior arm

When do we intervene?

- >1 minute between the head and body**
- No rotation noted with fetal head
- Chin pulls back into or against perineum after delivery of head
- Fetal distress (heart tone decelerations, dusky head color)
- Shoulders clearly impacted behind pubic bone
- No descent of shoulders with the next push

GHM Video: Putting it Together

- https://globalhealthmedia.org/videos/stuck-shoulders/

More Extreme Maneuvers

- Episiotomy
- Intentionally fracturing the clavicle
- Zavanelli Maneuver***
- Obstetric “Heroic Interventions”

Considerations After Resolving a Shoulder Dystocia: What do we need to prepare for?

Post Shoulder Dystocia Care

- Hemorrhage management
- Resuscitation/NRP
- Fetal injury/Newborn Exam considerations
  - Broken Clavicle
  - Nerve Damage (Erb's Palsy)
  - HIE (typically with extensive resuscitation)

Newborn Exam Considerations

- Injury occurs in approximately 5% of SDs (UpToDate)
- Fractures: 1.7-9.5%
    - Clavicle or humerus
    - Palpable bump along the bone or significant one-sided swelling
    - Decreased arm mobility
    - Pain response upon palpation
- Nerve Damage: 3.0-16.8%
    - Diminished reflexes on one or both sides
    - Inability or difficulty moving arms or turning head
    - Advanced imaging studies
- Hypoxic-ischemic Encephalopathy: .3%
    - Prolonged resuscitation
    - Absent suck reflex or diminished reflexes
    - Inability to nurse, maintain temperature, or other vital signs

When do we call EMS?
What are the pros and cons of each of these?

- Anticipatory: When you suspect a shoulder dystocia during second stage
- In the moment: When you are experiencing a shoulder dystocia
- After: When you have gotten the baby out, but took significant measures to do so

EMS Considerations

- Location/length of time for EMS response (Where are you located? How fast does EMS arrive in your area?)
- Fetal condition in second stage (Were you already having decelerations prior to the shoulder dystocia?)
- Maternal comorbidites (Are we concerned about other factors, such as hemorrhage or high blood pressure?)
- Baby's health (Is the baby transitioning appropriately? Do you suspect any injuries or problems?)
- **Remember: The parents can always refuse EMS transport and turn them away if they feel all is well postpartum - it is okay to have them present on standby, even if the EMTs don't love it!**

Case Study (SD #24)

- Your client has been pushing for two hours. For the past 30 minutes or so, or client has been moving toward crowning. They are semi-reclining. Now, the baby's head crowns slowly, the head is born and before restitution can happen, the baby's chin is pulling back, pressing against the perineum. What are you going to do? List steps, in order, that you would perform to get this baby born. Take me through your last resort. What would change if the client was squatting and a shoulder dystocia occurred?

Clinical Practice Guidelines for SD Management

- Your clinical practice guidelines are the roadmap of your practice. They can prove that you have plans in place and are prepared for emergencies.

- Avoid being overly specific - if you don't follow your own guidelines, this can come back to bite you!

- Demonstrate enough knowledge to take charge and manage a complication, but not so much specificity that you're required to follow the same algorithm every time. Remember, it may take different management skills for different cases! Your CPGs are a guidelines, NOT a case study.

Clinical Practice Guidelines for SD Management

- Things to include:
  - Any additional trainings on SD that you have experienced (BEST training, etc)
  - General use of maneuvers (you don't have to list each thing, just demonstrate that you *will* use hands-on maneuvers to help a baby get out)
  - Postpartum considerations and care
  - EMS transport plans

Processing with Clients

- Explain your steps as you move along (tell your client what is occurring and what you are doing; explain resuscitation measures as they are occurring)
- Offer an opportunity to process in the immediate postpartum period
- Offer opportunities to process at each postpartum visit
- Do not “explain away” your actions or minimize the complication: you want to be clear, direct, and fact-based, but also give the parents space to understand
- Validate the family’s feelings and reactions; we want to avoid being defensive or unintentional gaslighting
- Remember, we do not get to decide whether a birth was traumatic - only the parent experiencing the birth can decide this! It is our job to help them understand the steps why took, why we took them, and remove any feelings of self-guilt or self-blame from the parents.
- Use careful language! Words are powerful!