INTRODUCTION
Shoulder dystocia is an obstetric emergency that occurs when the head of an infant is delivered, but the baby’s shoulders do not follow spontaneously or with gentle traction on the fetal head. Consequently, clinicians employ one or a series of maneuvers to relieve the situation and accomplish delivery.

Shoulder dystocia can result in injuries to the brachial plexus of the infant, primarily Erb’s Palsy. Other injuries include fractures of the clavicle or humerus. There is also a risk of hypoxic injury and even death if delivery is not accomplished promptly. Although shoulder dystocia is an uncommon obstetric occurrence—statistics show that its incidence ranges from less than 1 percent to 4 percent of deliveries—it is not an uncommon professional liability claim. Most cases of shoulder dystocia resolve without permanent injury, with fewer than 10 percent resulting in persistent brachial plexus injury. When permanent injury does occur, litigation is likely to ensue.

A review of NORCAL shoulder dystocia claims revealed the following common allegations:

- Failure to:
  - Appreciate risk factors, including the following:
    - Excessive maternal weight gain
    - Positive glucose screening test
    - Postdate gestation
    - Prolonged active phase of first stage of labor
    - Prolonged second stage of labor
    - Operative vaginal delivery
  - Attempt to accurately estimate fetal weight prior to delivery
    - Perform a glucose tolerance test when urine tests positive for sugar
    - Follow up with treatment when patient tests positive for gestational diabetes
    - Call for back-up
    - Correctly perform maneuvers to deliver the shoulder or perform them in an organized and expeditious manner
  - Excessive application of traction
  - Early use of vacuum or forceps
  - Use of fundal pressure rather than suprapubic pressure

The relative infrequency of shoulder dystocia can leave clinicians unprepared for its occurrence; this lack of preparedness makes it a particularly dangerous event. Physicians and nurse midwives may appear nervous or even frantic when trying to dislodge the shoulders. From the time that a shoulder dystocia is diagnosed, the labor and delivery team has approximately five minutes to deliver the fetus vaginally before the fetus’ acid-base status is compromised. The potential for caregivers to panic can heighten the parents’ anxiety and cause doubts about the overall quality of care. Confusion over whether to apply suprapubic or fundal pressure can only increase parental doubts (see sidebar, Never Use Fundal Pressure During a Shoulder Dystocia Delivery, on page 3).

This Claims Rx offers risk management strategies to help physicians and allied health professionals prepare for the management of shoulder dystocia. Management of shoulder dystocia necessitates a calm, coordinated approach that includes knowledge of current maneuvers to relieve the

(continued on page 2...)
condition, a willingness to communicate clearly and compassionately, and the ability to document the process thoroughly.

Shoulder Dystocia is Difficult to Predict

Clinicians can anticipate, and thus prepare for, many potential obstetrical emergencies. Unfortunately, it is difficult to predict shoulder dystocia, even in the presence of the following known antepartum and intrapartum risk factors.4,5,6

Antepartum Risk Factors
- Maternal obesity or excessive maternal weight gain
- Presence or history of diabetes mellitus
- Postdate gestation
- Multiparity
- Previous delivery of large infant
- Pelvic deformity
- Short stature
- Age older than 35 years
- History of shoulder dystocia in previous deliveries
- Suspected fetal macrosomia and/or sonographic evidence of disproportion between chest and head or shoulder and head

Intrapartum Risk Factors
- Prolonged active phase of first stage of labor
- Prolonged second stage of labor
- Significant molding
- Failure or arrest of descent
- Assisted vaginal delivery (with forceps or vacuum)
- Macrosomic fetus
- Head retraction
- Difficulty with head rotation

Fetal macrosomia and maternal diabetes are two antepartum risk factors strongly associated with shoulder dystocia. The risk for shoulder dystocia increases with birth weight; however, accurately predicting birth weight is a difficult task. Further, the incidence of macrosomia was reported in one study as almost threefold among diabetic women;7 yet the presence of diabetes or macrosomia does not guarantee shoulder dystocia. To complicate matters even more, the majority of shoulder dystocia cases occur among infants who are not macrosomic and among women who are not diabetic. In spite of such difficulties, clinicians should maintain a high index of vigilance when encountering the factors listed above.

Case Study

The following case illustrates the tragic effect of failing to recognize and act on significant risk factors for shoulder dystocia. The situation was exacerbated by an inappropriate management plan at the time of delivery.

Allegation
Negligent prenatal care and negligent management of shoulder dystocia during delivery resulting in brachial plexus injury with severe permanent residual disability.

Prenatal Care
A 36-year-old, 5-foot, 4-inch, 216-pound patient (G6P5) presented to her obstetrician in her twentieth week of pregnancy. She had a history of delivering five large babies. The youngest was born one year earlier and weighed 10 pounds, 12 ounces; shoulder dystocia had been a complication. The patient also had a family history of diabetes mellitus. The patient’s prenatal care included regular urine testing at the time of office visits with no spilling of sugar noted. However, the obstetrician did not order a screening test for gestational diabetes or an ultrasound, despite the history of a prior large infant whose delivery was complicated by shoulder dystocia. Moreover, the physician did not discuss the possible alternative of delivery by cesarean section.

At the time of delivery, the doctor encountered dystocia of the left anterior shoulder. He attempted a Woods’ Screw maneuver to resolve the

(continued on page 4...)
Never Use Fundal Pressure During a Shoulder Dystocia Delivery

Fundal pressure is contraindicated in the presence of shoulder dystocia. Such pressure, which is applied with one hand on the uterine fundus at a 30 to 45 degree angle to the maternal spine in the direction of the pelvis, increases the risk of complications and injuries for both the fetus and the mother. Further shoulder impaction, brachial plexus injuries, orthopedic or neurological injuries and increased risk of hypoxia are among the dangers for the fetus. Potential maternal complications include third- and fourth-degree perineal lacerations, anal sphincter tears, uterine rupture and hypotension.

In contrast, suprapubic pressure, which is directed away from the pubic bone to the left or right side, using the palm of the hand, can be used alone or with the McRoberts maneuver to help dislodge an impacted shoulder.

Many claims that result from shoulder dystocia occur because of the inappropriate application of fundal pressure to relieve the shoulder dystocia. Frequently, these cases have been decided for the plaintiff because documentation in the medical record indicated that fundal pressure was used. It is imperative that all members of the perinatal team recognize the difference between suprapubic and fundal pressure, appreciate the safety advantage of suprapubic pressure and accurately document the application of suprapubic pressure in order to avoid misconceptions about the use of “pressure” during delivery.

Simpson and Knox (2001) suggest the following measures to create a labor and delivery environment in which fundal pressure is less likely to be used:

- Skilled nursing assessment and prompt communication with the physician about labor progress and fetal status/station may lessen the chance that the physician will request application of fundal pressure. It may also reduce the chance of vacuum- or forceps-assisted delivery.
- It is prudent to consider factors, independent of time frames, that are associated with how labor progresses. These include timing and dosage of epidurals, fetal size and position, and the mother’s pelvic structure.
- Consider the appropriateness of passive fetal descent and delayed pushing for women with an epidural (i.e., laboring down).
- An analgesic epidural may not slow labor progress or hinder the mother’s pushing efforts as much as an anesthetic epidural.

It should be clear among all clinicians that application of fundal pressure is not appropriate in the presence of shoulder dystocia. Without such consensus, disagreements between clinicians are apt to occur in front of the patient. Such disagreements undermine the patient’s confidence in the labor and delivery team’s ability to manage the situation effectively. This can spark litigation in the event that an injury occurs.

Obstetric healthcare professionals and risk managers recognize that inappropriate application of fundal pressure can be a recipe for disaster. Plaintiff attorneys, patients and medical experts—armed with study data—will readily connect any indication of fundal pressure to subsequent injury. Therefore, it is well worth it for clinicians to take measures to protect patient safety and reduce their liability risks when contemplating the use of fundal pressure.

References
2 Simpson KR. Shoulder dystocia: nursing interventions and risk management.
problem, with nursing personnel simultaneously applying fundal pressure. Eventually, a 12-pound, 8-ounce infant was delivered. The baby had severe left-arm paralysis.

Three years later, the parents filed suit against the obstetrician, claiming damages for personal injuries, medical expenses, future lost earnings and diminution of future employment for the child.

**Expert Review**

The experts who reviewed this case felt that the physician failed to:

- recognize and act upon several prenatal risk factors for shoulder dystocia, including the following:
  - maternal weight;
  - diabetes history; and
  - previous delivery of large infants;
- adequately screen for gestational diabetes;
- provide nutrition counseling;
- monitor the patient’s diet; and
- call for help when the dystocia was encountered.

In addition, the experts were critical of the application of fundal pressure. They felt that this might have further impacted the shoulder (see sidebar, *Never Use Fundal Pressure During a Shoulder Dystocia Delivery*, on page 3).

**Risk Management Recommendations**

The keys to prevention and management of shoulder dystocia include a heightened awareness of risk factors, knowledge of and practice in techniques to relieve shoulder dystocia, development of an institutional response plan, and solid communication and documentation practices.

Because shoulder dystocia is unpredictable, being prepared can put you in a stronger position to manage its occurrence. Regular review of shoulder dystocia educational materials, such as ACOG’s video, *Shoulder Dystocia Drill*, and regular practice of shoulder dystocia drills can help you maintain competency in shoulder dystocia interventions. (Order the *Shoulder Dystocia Drill* video by calling ACOG at (800) 762-2264.)

Other resources include the sample *Algorithm for the Management of Shoulder Dystocia* on page 10 (originally published by the American Academy of Family Physicians) and the flashcards, *Are You Ready for Shoulder Dystocia?*, which are available by calling NORCAL’s Risk Management Department at (800) 652-1051, ext. 2244.

**Prenatal Checklist for All Patients with Known Shoulder Dystocia Risk Factors**

- Documentation should include the following elements:
  - Patient history
  - Awareness of potential patient risk factors for shoulder dystocia (e.g., history, age, weight, parity) and notation that potential for shoulder dystocia was discussed with the patient
  - Clinical evaluations (including clinical and sonographic estimation of fetal weight; clinical pelvimetry may also be useful in cases where the patient has experienced a prior injury to the pelvis)
  - Tests ordered (e.g., glucose), results and action taken
  - The delivery plan (e.g., trial of labor)
  - Justification for the plan
  - Notation that discussion of alternative delivery by c-section occurred and the patient’s choice
  - Estimated fetal weight on admission to labor and delivery (consider and document whether the estimated fetal weight is consistent with the prenatal fundal height measurements)
- Inform patients with known risk factors about the increased risk of shoulder dystocia. Inform the patient of the risks and benefits of vaginal versus cesarean delivery. Document the discussion and patient choices. (The American College of Obstetricians and Gynecologists...
NORCAL Risk Management

(ACOG) advises that planned cesarean deliveries are not warranted for all women carrying a macrosomic fetus; however, planned cesarean delivery may be a reasonable alternative for diabetic pregnant women with estimated fetal weight exceeding 4,500 g or for non-diabetic women with estimated fetal weight exceeding 5,000 g.²

- Develop and share a delivery plan with covering physicians.
- Have a predetermined plan, based on generally accepted practices, to organize emergency management when shoulder dystocia occurs. Department protocols or guidelines should be reviewed and updated to reflect current obstetric practice.
- Be aware that you significantly increase the likelihood of shoulder dystocia by using instruments such as forceps or vacuum extraction.
- In the presence of macrosomia and an abnormal labor pattern, consider delivery in the OR rather than in a labor and delivery room.
- Medical staff should work with the hospital to develop its institutional protocol for shoulder dystocia. Although the resources available in the individual institution must be considered when hospitals develop a protocol for the management of shoulder dystocia, a protocol should include the following steps:¹²
  - Identify appropriate personnel who will be contacted upon diagnosis of shoulder dystocia.
  - Notify the hospital telephone operator, who will announce a page such as “Code D, Labor and Delivery.”
  - Contact previously selected personnel such as pediatricians, neonatologists, anesthesiologists, neonatal intensive care unit (NICU) nurses and/or respiratory therapists to come to the delivery room. These individuals should all have a clear understanding of their responsibilities in the management of shoulder dystocia. In addition, at least one other physician with obstetric skills should be available to assist immediately.
  - If the attending clinician anticipates shoulder dystocia, this additional physician should be notified in advance.¹²
  - Arrange for a second nurse in the delivery room to be responsible for recording and timing events, obtaining necessary equipment and supplies, and notifying the birth attendant of time intervals.

Post-delivery Checklist for Deliveries Complicated by Shoulder Dystocia

- Conduct a lower birth canal examination, uterine exploration and neonatal x-ray.⁹
- Immediately after completing needed patient care, review the electronic fetal monitoring (EFM) strip and talk with other providers in attendance to ensure the most accurate understanding of clinical circumstances. Inconsistencies between nursing and physician notes are likely to raise doubts about care rendered.
- Talk to the parents. Explain that shoulder dystocia is an uncommon complication of childbirth and that it can result in serious injuries. Explain that it is difficult to predict shoulder dystocia, but that the appropriate medical care was given. When talking to parents:
  - Empathize and offer emotional support by conveying compassion and focusing on their needs (e.g., “I am sorry that you...” or “I am sorry for your...”). Avoid, “I am sorry that I...”.
  - Accept responsibility for follow up of serious complaints, but do not accept or assign blame, or criticize the care or response of other providers. While it may be tempting to criticize the quality of care rendered to a patient, it is inappropriate to criticize the care or response of other providers when you are not aware of all the factors related to the decisions those providers made.

A forthcoming issue of Claims Rx will address in greater detail the topic of appropriate communication and documentation following an unanticipated outcome.

(continued on page 6...
The Medical Record is Your Best Defense

When injury results from shoulder dystocia, it is likely that litigation will ensue. If this happens, the medical record will be used to review the events and outcome. It is critical that the medical record accurately reflect diligent prenatal care, a well-thought-out labor and delivery plan, an organized sequence of maneuvers to expedite delivery, and approximate timeframes. In summary, strong post-delivery documentation includes the following:

- Length of first and second stages of labor
- Explanation of why labor slowed
- When and how the shoulder dystocia was diagnosed (include physical findings, analysis of contraction activity, position and rotation of fetal head)
- Plan for management (e.g., mode of delivery)
- Clinician decision-making rationale
- Patient’s informed consent or refusal
- Notation of clinical staff called to assist (e.g., pediatrician, neonatologist)
- Summarization of the series of interventions and clinical events, with a focus on presenting the step-by-step approach used to relieve the impacted shoulder and resuscitate the newborn
- Maneuvers used, the order in which they were performed, their degree of difficulty or success and the clinical rationale for using them
- An indication that there was some thought given to how much traction was appropriate (e.g., traction documented as “measured” or “controlled”)
- A close approximation of the time interval between delivery of fetal head and body (a minute-by-minute account should be avoided unless there is absolute certainty that the times are accurate)
- A realistic description of the level of impaction may later help to explain any residual impairment

Summary of Key Shoulder Dystocia Risk Management Strategies

- Always examine the laboring patient and record an estimated fetal weight in the admission note. Check and document that this weight is consistent with fundal height measurements.
- Always consider and document risk factors for shoulder dystocia in the admission note (maternal obesity, presence or history of diabetes, prior macrosomic infant or current suspected macrosomia, excessive maternal weight gain and history of prior shoulder dystocia).
- Discuss the option of Cesarean section with the patient in the presence of maternal diabetes and fetal macrosomia (>4500 g), or in the presence of fetal macrosomia (>5000 g) without maternal diabetes or a prior history of shoulder dystocia. Document this discussion.
- Always consider the possibility of shoulder dystocia prior to operative vaginal delivery with forceps or vacuum and discuss the risks of operative vaginal delivery with the patient prior to placement of the forceps or vacuum. Record this discussion in the record.
- Upon encountering a shoulder dystocia, proceed in a deliberate fashion with the maneuvers described in this Claims Rx. Call for help and do not panic.
- Consider using the Shoulder Dystocia Documentation Guide and dictate delivery notes of deliveries complicated by shoulder dystocia.
- Always obtain a cord blood gas measurement after a delivery complicated by shoulder dystocia.
- Never use fundal pressure during a shoulder dystocia delivery.
Case Study
Management of Shoulder Dystocia Can Be Defended

Although shoulder dystocia is difficult to manage and sometimes results in permanent injury, the infrequency of its occurrence and the difficulties in accurately predicting its occurrence can help provide a defense in medical professional liability cases. The key to a good defense is following a plan of action and providing clear and accurate documentation, as the following case illustrates.

Allegation
Negligent prenatal care and delivery resulting in shoulder dystocia and brachial plexus injury.

Prenatal Care
A 34-year-old female (G5P4) was seen for prenatal care at eight weeks gestation. The patient was five feet tall and weighed 144 pounds. One previous pregnancy included twins and one included a spontaneous abortion. The patient had no history of macrosomic babies; the largest baby was seven pounds. Each of her deliveries was vaginal and the length of labor ranged from six to eight hours. The patient was evaluated at nine subsequent visits. Fundal heights remained consistent for gestational age. At 24 weeks, the patient underwent a fasting one-hour glucose tolerance test (GTT), which was borderline for gestational diabetes. A fasting three-hour glucose test revealed one result in the high range (186 mg/dl at 1 hour). All other results were normal. The patient had two ultrasounds during the pregnancy. Total weight gain was 42 pounds. The patient was counseled throughout the pregnancy about her diet and excessive weight gain. This was documented in the record.

Labor
The patient went into labor at 3:00 am on her estimated date of confinement (EDC) when her membranes ruptured spontaneously. She was admitted to the hospital at 3:45 am and was given Pitocin at 6:00 am. She was completely dilated by 10:05 am.

At 10:35 am, the obstetrician performed a midline episiotomy under local anesthesia and delivered the head. Shoulder dystocia was encountered and obstetrical back up was immediately called. The obstetrician performed a McRoberts maneuver, which was unsuccessful. He then performed a Woods Screw maneuver by rotating the baby’s shoulders clockwise and delivering the left shoulder first, which was anterior, and the right shoulder second, which was posterior. The baby was delivered at 11:05 am. The types of maneuvers and the order in which they were deployed were documented in the record.

Outcome
Onset of spontaneous respirations following delivery was briefly delayed. The infant received oxygen by bag and mask with continuous positive airway pressure. The APGARS scores were six at one minute and nine at five minutes. The birth weight was 4500 g. After the delivery, it was noted that the newborn suffered a brachial plexus injury. When the child was four years of age, a pediatric neurologist’s examination revealed “moderate to severe” Erb’s Palsy, with involvement from C5 to T1. The parents subsequently filed a lawsuit.

(continued on page 8...)

Document the delivery in the medical record within a reasonable time after the mother and newborn are stabilized. Consider using a documentation template, such as the sample Shoulder Dystocia Documentation Guide that appears on page 11.
Expert Review
The plaintiff’s experts argued that the patient’s weight gain was excessive and that she was obese at the beginning of the pregnancy, which increased her risk for shoulder dystocia. They also claimed that since her one-hour GTT was abnormal and one of the three-hour GTT values was abnormal, she was a borderline gestational diabetic, which further increased her risk for shoulder dystocia. The plaintiff’s experts felt that the doctor should have advised the patient that she might have a large baby and given her an opportunity for an elective cesarean section. Additionally, the plaintiff’s experts argued that too much lateral traction was applied, which created a distance between the impacted right shoulder and the head and caused damage to the brachial plexus.

Defense experts concurred that the patient was obese at the beginning of the pregnancy and that her weight gain was excessive. However, the obstetrician counseled the patient about her weight on numerous occasions throughout the pregnancy and documented those discussions in the record. Defense experts contended that although the one-hour GTT was abnormal and one of the three-hour GTT values was abnormal, the patient was appropriately not diagnosed as having gestational diabetes. They did, however, point out that nutritional counseling was warranted. Further, the defense experts felt that since the patient did not deliver a macrosomic baby in her previous pregnancies (which the same obstetrician followed, and in which the patient gained a similar amount of weight), the patient’s weight alone was not indicative of a possible shoulder dystocia. Thorough documentation in the medical record revealed that the obstetrician handled the shoulder dystocia appropriately once it occurred.

Disposition
The case went to trial. After deliberating for two hours, the jury voted 12-0 for the defendant.

CONCLUSION
Shoulder dystocia is unpredictable; however, once perinatal providers encounter it, there are reasonable steps that they should take to attempt to dislodge the impacted shoulder. Be aware of these interventions and have a preset plan of action should shoulder dystocia occur. Most important, remain calm during the delivery, ensure that the medical record reflects the events as accurately as possible and openly discuss the delivery with the parents after conferring with other members of the perinatal team.

References
11. Triple risk factors can signal shoulder dystocia: when you see them together, be prepared [Newspaper article; interview with Gary Hankins, MD]. October 1996.

Maneuvers for the Relief of Shoulder Dystocia
This section is extracted from the review article “Shoulder Dystocia,” which originally appeared in the September 1998 issue of Hospital Medicine. Permission to reprint/adapt was granted by Mark Allan Publishing.1

Upon recognition of shoulder dystocia, O’Leary and Leonetti (1990) advise us to beware of the “three Ps” resulting from panic—pulling, pushing and pivoting. Following delivery of the head, the fetal pH is estimated to decline at a rate of 0.04/minute (Wood et al, 1973), which means that measures should be performed expeditiously but without haste. Applying fundal pressure (“pushing”) is illogical since this will not overcome anterior shoulder impaction and may be associated with neonatal injury (Gross et al, 1987). Similarly, applying increasing degrees of lateral traction (“pulling and pivoting”) onto the infant’s cervical spine is associated with (continued on page 9...).
BPP [brachial plexus palsy] and should be discouraged.

First-Line Maneuvers
The majority of infants will be successfully delivered by employing these techniques.

McRoberts Maneuver
Increasing the diameter of the pelvic inlet can be achieved by hyperflexion of the maternal hips keeping the thighs parallel to the uterus. The woman herself can be asked to perform this but it is likely that she will require assistance. If already in the lithotomy position her legs should be removed from stirrups in order to achieve maximum flexion. The McRoberts maneuver results in flattening of the lumber lordosis and reduces the angle of inclination of the pelvic brim. This allows the anterior shoulder to slip below the pubic symphysis and results in reduced extraction forces (Gonik et al., 1989). It is estimated that 40 percent of shoulder dystocia cases will be relieved by the McRoberts maneuver alone (McFarland et al., 1996; German et al., 1997) with a very low incidence of neonatal and maternal sequelae. An alternative is to encourage the mother to squat, which achieves the same degree of hip hyperflexion.

Suprapubic Pressure
The purpose is to displace the anterior shoulder from above and behind the pubic symphysis so that the shoulder can enter the pelvis. The direction of force is best applied from behind the anterior shoulder (Mazzanti technique); an experienced assistant may maximize the success of the maneuver. Applying lateral suprapubic pressure (Rubin technique) is a logical method of displacing the shoulder into the oblique (and wider) pelvic diameter.

Episiotomy
A large episiotomy or the extension of a small one is recommended to permit further intravaginal manipulations. The deliberate incising of the anal sphincter and rectovaginal septum has been advocated (O’Leary and Leonetti, 1990) but the dystocia is at the level of the pelvic inlet and is not a consequence of outlet soft tissue dystocia.

Second-Line Maneuvers
The following maneuvers will uncommonly be required to complete delivery.

Rotation of the Fetal Shoulders (Woods Screw Maneuver)
Woods and Westbury (1943) first described this. They suggested that pressure should be applied to the front of the posterior shoulder so that the fetus is rotated through 180 degrees such that the now anterior shoulder is below the pubic symphysis (the posterior shoulder is usually found in the sacral hollow below the pubic symphysis). The infant is said to be delivered like a cork being removed from a bottle. A further refinement is to reverse the direction of rotation where pressure is applied to the back of the posterior shoulder, which encourages shoulder adduction and reduction of the infant’s bisacromial diameter (Rubin maneuver).

Delivery of the Posterior Arm
This is the arm most easily reached and is sought by passing a hand into the posterior vagina following the fetal arm until the elbow is reached and flexing the arm across the chest. If this is achieved then delivery usually follows, but if not then the arm can be used to apply traction or to rotate the trunk as in the Woods Screw maneuver. Delivering the posterior arm is associated with a risk of clavicular and humeral fracture but this should not discourage the use of what is an effective technique. Other vaginal techniques include the use of forceps to dislodge the anterior shoulder and the Hibbard technique (O’Leary and Leonetti, 1990; Morrison et al., 1992). Reported experience with these latter techniques is very limited and they are not described further. Vaginal manipulation is aided by effective maternal analgesia. A significant proportion of these women will already have regional analgesia but for those that do not, a general anaesthetic should be considered.

Extreme Maneuvers
Extreme measures will only very rarely be required and by their very nature are invasive. These include cephalic replacement (Zavanelli Maneuver), symphysiotomy and deliberate fracture of the fetal clavicle. Very few obstetricians [or midwives and family physicians who practice obstetrics] will have any experience with cephalic replacement or symphysiotomy.

To see illustrations of the McRoberts and Rubin maneuvers, visit www.aafp.org/afp/981101ap/morrison.html.

Reference
ALGORITHM FOR THE MANAGEMENT OF SHOULDER DYSTOCIA

Adapted with permission from: Morrison EH. Common peripartum emergencies. American Family Physician. 1998;58(7). Copyright © The American Academy of Family Physicians. All rights reserved.

Shoulder dystocia

Call for help
Ask patient to stop pushing
Note the exact time; start digital clock

McRoberts Maneuver:
- Have assistants hyperflex the patient’s hips against her abdomen
- Have an assistant apply gentle posterolateral pressure suprapubically
- Continue moderate posterior traction on the fetal head

Maneuver unsuccessful

Call for any available anesthesiologist, pediatrician and obstetrician to Labor & Delivery STAT
Consider episiotomy if not already done

Fetal Shoulder Rotation - For Example, Rubin Maneuver:
- Press on the posterior aspect of the posterior fetal shoulder, rotating the shoulder girdle into an oblique angle

Maneuver unsuccessful

Deliver posterior shoulder:
- Slide hand under the posterior shoulder to the fetal elbow
- Apply pressure at the antecubital fossa, flexing the fetal arm
- Grasp the fetal arm and pull it over the chest and out to deliver the shoulders

Maneuver unsuccessful

Consider Zavanelli maneuver:
- Rotate the fetal head to the direct occipitoanterior position
- Flex the fetal head and replace it in the vagina
- Hold the fetal head in place until cesarean delivery

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SHOULDER DYSTOCIA DOCUMENTATION GUIDE

DATE: _______ TIME: _______ ATTENDING PHYSICIAN: ______________________________________

ASSISTANT: ____________________________________________

ESTIMATED FETAL WEIGHT ON ADMISSION: _________________

PREGNANCY COMPLICATIONS:  LABOR COMPLICATIONS:

Diabetes (insulin) □  Protracted Active Phase □
Gestational diabetes □  Secondary Arrest of First Stage □
Postdates □  Prolonged Second Stage □

DELIVERY MODE:

Spontaneous  □  Vacuum  □  Forceps  □

OUTLET □

Position (please circle): ROA, OA, LOA, ROT, LOT, ROP, OP, LOP

Station: Scalp visible □  Skull at pelvic floor □

Present?: Labial separation □  Dilating rectum □

Bulging perineum □

LOW □

Position (please circle): ROA, OA, LOA, ROT, LOT, ROP, OP, LOP

Station >/=+2 (of 5) □

SHOULDER DYSTOCIA:

Anterior Shoulder R   L

Episiotomy 2nd  3rd  4th

Time head delivered: _______________________

Time delivery completed: _______________________

Total elapsed time: _______________________

Maneuvers:

Moro reflex: □

McRoberts □

Suprapubic pressure □

Shoulder rotation □

(Woods or Rubin) □

Posterior arm □

Replacement of head for c-section □

NEONATE:

Weight _________

APGARS 1 min  5 min  10 min

Cord Venous pH_____  Arterial pH_____

Gases PCO2_________  PCO2_________

PO2_________  PO2_________

HCO3_________  HCO3_________

BE___________  BE___________

Moro reflex:

Symmetrical? Yes □  No □

R L Impaired

Admission to special care nursery? Yes □  No □

Transfer?: Yes □  No □

CHART DOCUMENTATION INCLUDES:

Narrative □

Level of traction applied (e.g., “moderate” or “controlled”) □

Discussion with parents □

Personnel called to assist □

Signed: ___________________________________________________, MD Date: ____________

This form is adapted with the permission of Physicians Insurance Exchange.

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