Persistent Occiput Posterior

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**Question 1:**

Given the fact that physical examination is notoriously inaccurate for determination of fetal head position, would you recommend routine use of ultrasound to confirm fetal head position for all patients in the second stage of labor who are felt to have persistence of the occiput posterior position based on physical examination alone?

**Response from Dr. Barth:**

*No. Often the physical exam is very clear. None of the studies examining the accuracy of physical exam adjusted for the confidence in that particular patient. However, I have been humbled. A number of years ago, after one of the nicest Kielland rotations I ever performed delivered occiput posterior, I became more liberal with ultrasound.*

*I work in a large, university teaching hospital. It is my practice to encourage the residents and students to double check their exam if uncertain about the position at all. But I do that for teaching purposes as much as anything. I definitely look with ultrasound before any rotation, again, as I mentioned in the article, because I want to confirm the correct direction for any possible rotation if the patient is a candidate.*

**Question 2:**

You reported that use of ultrasound for determination of fetal head position is highly reproducible in experienced hands. How accurate is this method when utilized by less experienced clinicians?

**Response from Dr. Barth:**

*I am not familiar with any studies that have examined the diagnostic accuracy of ultrasound for fetal head position by inexperienced examiners. But this is a simple ultrasound exam and the article includes photos typical of the common positions.*
Question 3:

You stated that you do not perform prophylactic manual or digital rotation when your pelvic examination is consistent with an anthropoid pelvis. Are there any circumstances under which you would not be willing to perform this procedure? Are there any other maternal or fetal contraindications to these types of procedure (ie, fetal growth restriction, fetal anomalies, maternal morbid obesity, etc)?

Response from Dr. Barth:

I would not consider fetal growth restriction a contraindication to an attempt at manual rotation if indicated. However, I would be reluctant to attempt a manual or digital rotation in the setting of extreme prematurity, but I would not consider that an absolute contraindication and I’m not familiar with any publications that would suggest it should be. Fortunately, second stage arrest is usually not an issue for such patients. For fetal anomalies, it would depend on the nature of the anomaly and there are simply too many considerations here to offer advice other than I would “individualize” my approach in such cases. I would not consider maternal morbid obesity a contraindication at all; indeed, cesarean delivery for such patients is not simple, and to the extent this very low risk procedure offers a means of decreasing the need for second stage cesarean delivery, it should be encouraged.

Question 4:

In your practice, prophylactic manual rotation is performed as a means of preventing persistent occiput posterior when patients are halfway into the second stage of labor. Do you think outcomes might be different if the indication for this procedure was a particular station of the fetal head rather than time into the second stage of labor?

Response from Dr. Barth:

From a pragmatic perspective, time is just easier. But that’s a great question. I suspect there is less interobserver and intraobserver variability in the ascertainment of time compared to station such that a prospective study would be difficult. Furthermore, as I mentioned in the article, station can be difficult to assess accurately in occiput posterior.

Question 5:

In your experience, are prophylactic manual or digital rotations more successful in multiparous patients?

Response from Dr. Barth:

From my own experience, I believe so. But the effect is not large. Le Ray and colleagues noted only a slight increase in nulliparity when they compared failed to successful rotations and the difference did not reach statistical significance (see Obstet Gynecol 2007;110:873–9).

Question 6:

As you pointed out, there are a decreasing number of practicing physicians willing to perform or teach rotational forceps procedures despite the newer studies demonstrating more favorable fetal outcomes and fewer maternal third- and fourth-degree lacerations. Are you able to speculate about why there continues to be so much resistance to performing these procedures despite this growing body of evidence?
Response from Dr. Barth:

I agree with the authors of one of the recent Kielland reports who speculate, “although reasons for this decline are complex, the perception that rotational forceps are associated with increased complications and litigation is likely a strong influence” (see Obstet Gynecol 2013;121:1032–9). This was one of the main reasons I wanted to write this piece, to increase awareness that the outcomes with contemporary Kielland rotations are very favorable for both the mother and newborn.

Question 7:

Although the challenge posed by the dwindling number of physicians willing to perform rotational forceps procedures will likely persist, the general appreciation that “not all occiput posteriors are the same” and the more routine incorporation of prophylactic manual or digital rotation into clinical practice are feasible goals. What are the common pitfalls or mistakes to be avoided by physicians as they begin to incorporate prophylactic manual or digital rotation into their clinical practices?

Response from Dr. Barth:

The most important pitfall is to assume that all women with occiput posterior in the second stage are candidates for a rotation; they are not (see Figure 4 in the article). I think there is something to be said by following a standard approach over and over again, like practicing a tennis serve, a golf swing, or a pilot’s checklist, it becomes second nature. In my own practice, I am more confident when I remind myself to go through the 5 questions (see Box 1 in the article) in approaching a patient with suspected persistent occiput posterior. That’s my best advice in avoiding pitfalls, and again, one of the main reasons I wanted to write this piece.

Question 8:

In my own experience, when patients are faced with these types of decisions (to proceed with cesarean delivery compared with attempted rotational forceps delivery), they tend to focus on risks to the fetus. Can you comment specifically on how fetal morbidity with a rotational forceps delivery compares to a cesarean delivery in the setting of persistent occiput posterior?

Response from Dr. Barth:

First, there are no prospective trials comparing the fetal risks of rotational forceps to the fetal risks of cesarean delivery in persistent occiput posterior. I doubt we’ll see such a study.

Absent such a study, I think we have to counsel patients based on what has been published in case series and cohort studies (see references 74, 75, and 83–89 in the article), tempered with our own experience and judgment. I know we practice in an era in which the ideal is “nondirective counseling.” This ideal would have us provide patients with the data in a fashion they can understand and let them make the decision without infusing our own values and opinions. However, when at the bedside in a situation such as described in the introduction, I believe that presenting only data, absent my opinion on the best course, comes very close to abandoning my role as a human physician caring for another human. I always inform patients that the safest route of delivery for the fetus is by cesarean delivery, but that both routes are safe, that the fetal risks of a well-selected and carefully performed rotational delivery are very small. I remind them that the risks to themselves, and to their future pregnancies, are smaller with a successful rotation and vaginal delivery. I answer their questions and then usually step out of the room to give them privacy to talk and make the decision. One of my partners, Mike Greene, MD, said it best in an editorial accompanying a report on vaginal birth after cesarean delivery, “ultimately, risk, like beauty, is in the eye of the beholder” (see N Engl J Med. 2004;351:2647-2649).