Probability and the Black Cloud

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When my residents discuss their obstetric experiences, I frequently hear them use the terms *white cloud* and *black cloud*. A white cloud implies that a given resident routinely manages pregnant women who go on to have natural, uncomplicated vaginal deliveries. A black cloud indicates that the resident's cases frequently involve fetal distress, patient and doctor anxiety, and a last-minute rush to C-section.

I always cringe a little bit when I hear a resident claim to have a black cloud. Surely random forces dictate the outcomes of a resident's first OB cases. Common challenges can easily be over-represented by chance alone, and even routine management problems can be blown out of proportion emotionally. I ask residents with black clouds to relax and not make any career decisions just yet. Learn what you can from every experience, and trust that your case mix will even out over time.

But, perhaps I should be willing to admit that chance does play a role in who chooses to practice obstetrics and who does not. Certainly, most of my residency obstetrical training was trauma free. Even well into my career my outcomes were good—surprisingly good. In fact, in a secret place, I may have even started to believe that my practice was a little bit charmed.

But that changed.

It started with a call from the OB triage nurse. “You've got a patient here and she's bleeding. You need to come in. Now! And I'm getting the on-call obstetrician.”

“Okay,” I replied. “I'll be right there.”

I arrived on the OB ward 12 minutes later. The obstetrician was already there, standing just outside the patient's room. “She's having an abruption,” he said. “The fetal heart tones are holding, but she's nowhere near delivery. I'm taking her to C-section now.” Just then the nursing staff wheeled the patient's bed out the door and down the hall. The patient disappeared through the electric double doors of the operating room before I could even catch my breath.

It all happened so fast, it seemed unreal. With a chill I realized that another serious abruption had resulted in a lawsuit for one of my partners. Fortunately, this time the disorder had been quickly recognized. Grateful for the backup, I went to change into scrubs so that I could even catch my breath.

I asked the nurse to announce a shoulder dystocia emergency. Then, I asked the resident to step out of the way, and I took over the delivery. I quickly repeated the steps the resident had tried and had the exact same result. Nothing.

Muttering “Come on, baby. Come on, baby,” I ran through the other steps for reducing an impacted shoulder as outlined in the ALSO course; still the anterior shoulder would not deliver. I found myself nearly in tears with helpless frustration. I had always been able to get the shoulders out before. The grim prospect of failure was becoming all too real.

Three minutes after the dystocia alert was called—was it really only 3 minutes?—one of the community obstetricians arrived. Fortunately for all concerned, this one happened to have trained in Africa and had more experience with shoulder dystocias than anyone else at the hospital. While she put on her gloves, she asked me to cut an episiotomy and then to step away from the patient. I did as I was instructed.

She had the baby out in about 10 seconds. It looked like magic. “Dang,” she said. “My fingers always hurt after I do that.”

Then, just a few weeks later, a resident and I were working with yet another delivery. Our patient’s baby came out without a problem, but the
placenta was a little slow in coming. At about 10 minutes, the cord began to lengthen, and the placenta showed at the perineum. Bizarrely, the placental mass continued to grow. It grew to two or three times the normal size and then just sat there at the perineum, refusing to fall into the bucket. I put my hand on the maternal abdomen and could not feel the uterus.

I told the resident, “We have a uterine inversion.”

The resident blanched. “I’ve never seen one before,” she said.

“Me either,” I whispered. I looked up at the patient, who fortunately had an epidural in place. She was smiling and chatting with her husband. Her vital signs were holding steady.

I could remember only one thing about uterine inversions. I was supposed to put my fist in the middle of it and push it back into the abdominal cavity. But the adherent placenta made the mass so large that when I pushed in the middle of it, it ballooned like a giant doughnut and impacted on the perineum. It wasn’t going anywhere in that condition. So while I continue to press the mass firmly against the perineum, hoping to help keep the placenta attached, I asked the nurse to call for any obstetrician stat.

Because it was around 7 am and everyone was doing rounds, two obstetricians soon walked in. I explained my predicament. They stood there rubbing their chins and looking at the situation like a pair of auto mechanics. Then one of them said, “I know what we can try.”

The three of us massaged the uteroplacental mass until it was shaped like a cylinder rather than a doughnut. We carefully slid the cylinder back up into the patient’s vagina. Then one of the obstetricians used her fist to reform the normal pocket in the uterus. This obstetrician smiled and said, “I think we’d better take this placenta out back in the OR.”

The patient lived. However, because of an underlying placenta accreta, she lost her uterus.

Personally, I wasn’t doing so well either. I had been presented with three potentially lethal obstetric complications in fairly short order: a large abruption, a severe shoulder dystocia, and a uterine inversion. It was only because immediate—and I mean immediate—back up that everyone had survived. I was thankful. I was humble. And I was glad that trouble always comes in threes.

Except sometimes trouble comes in fours.

The woman had pushed for 3 hours, in part because she had a dense epidural. She was tired, but the fetal tracing looked good. The baby’s head was at the outlet and normally rotated. It seemed like a good time to give the resident some experience with the vacuum extractor. The woman gave her consent.

I helped the resident position the vacuum. He pulled through two contractions but the vacuum popped off each time. That wasn’t good. I reassessed the patient. The fetal head had not budged. I wanted to swear—I had never failed with a vacuum before. Fortunately, the fetal heart rate tracing remained normal. Better to swallow one’s pride and quit while one is ahead. I asked the nurse to have the on-call obstetrician join us in the room.

The obstetrician assessed the patient. “Well, I agree with your position and station, and there’s still plenty of room,” he mused. He gave the patient two options: one more pull with the vacuum or going straight to the OR. The patient chose one more pull with the vacuum. The obstetrician applied the cap.

Fifteen minutes later I was standing in the neonatal intensive care unit feeling horrible. The vacuum delivery had been much harder than anyone expected, and the baby had been born severely depressed. I watched as the NICU nurse practitioner threaded in an umbilical line and wondered if the twitching in the infant’s left foot was a seizure. Throughout the day, I had conversations with the parents, the neonatologist, the obstetrician, and the resident.

But the longest conversation I had that day (and much of the next week) was the one I had with myself. After literally decades of routine OB, why were potentially lethal problems that I could not manage myself now coming through the door like clockwork? I was again thankful that the excellent obstetricians at my institution had been immediately available to “rescue” me and the patients. But the last case kicked the crutch out from under that sense of security. Even my consultants could not prevent every bad outcome. I felt an increasing sense of powerlessness. Maybe, I thought, it was finally time to get out of obstetrics.

Then I saw it. I was reasoning like a resident. I had developed a black cloud.

What was my own advice? First, learn from every case. I had definitely reviewed each one in depth and developed new approaches for each contingency. The second part of the advice: trust the case mix will even out over time.

That’s the funny thing about random events. Just because something remarkable happens on average one time in 100 events or one time in 500 events, there is nothing to preclude something remarkable from happening four times in a row. I was seeing a pattern when there wasn’t one. The next obstetric crisis might be in 5 years as easily as it might be tomorrow.

So I just kept going and, curiously, my next 10 OB cases were all completely normal vaginal deliveries. But that was not the Cosmos evening things out. Within the context of modern obstetric care, that too was a random event.

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