

NON-FICTION | SPRING 2023

My Biggest Mistake

By Cormac Duff

A pregnant woman screams in agony in the passenger seat of a Fiat Punt. Another contraction – now they are coming every three minutes. Her husband floors the accelerator.

In the maternity hospital, her wheelchair screeches through the labor ward corridor. The midwife straps fetal monitors onto her round belly in the delivery room. The obstetric chief resident examines her – she is fully dilated. He takes one look at the readout. Late decelerations; the baby's heart rate falls with each contraction. There is trouble. The mother needs to deliver the baby – right now.

The porter and midwife shove her stretcher toward the emergency theatre. The student midwife frantically calls the neonatal resident, who is on call for times like these.

"— breathe, breathe, don't push —"

"— heart rate falling on the monitor —"

" — a smaller mask next door?—"

" — need more suction —"

" — she's got antibodies against the baby's blood —"

" — should I call the senior resident? —"

" — now push! Push —"

" — need more towels —"

" — almost there —"

I answer the beep. The baby decides to arrive right now.

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"— come on –"
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Suddenly there is silence. With one final push, the obstetric chief resident pulls out the infant. I glance at the clock: 1:02 a.m. I start the timer. Under the harsh delivery room lights, the baby is limp and purple. He's not breathing. The midwife looks at me expectantly.

"Cut the cord."

No one waits sixty seconds. No one hands Dad the scissors. No one poses for a photo. At the resuscitation bed, I dry and stimulate the baby. The APGAR timer beeps: one minute of life. He's still not breathing. I listen to his chest. There's a heartbeat – but it's too slow.

I apply the face mask and start breaths. One, two, three, breathe. I reposition the mask. One, two, three, breathe. I crank up the oxygen dial. One, two, three, breathe. The midwife hands me a smaller mask: it fits much more snugly. I hope to God I won't have to intubate: I still haven't placed a tube in an airway successfully. My neonatal chief resident bursts onto the scene. I update him in a rush.

"32-weeker: High-risk because of dropping heart rate. No respiratory effort, heart rate 80. Started assisted breathing; oxygen coming up now."

"Good. Have you called Intensive Care Unit?"

"No, I didn't think to..."

"What about the transport incubator?"

"I, um..."

"It's OK; I'll ring them. He's pinking up now; check his breathing again."

I pause the breaths, staring at his chest. Deep, abdominal breathing. Finally.

"Should I send off cord blood?"

The student midwife stares at me expectantly.

"She's anti-D," she reminds me. "The baby's blood could be affected."

"Em, sure. Send off a sample for blood type and antibodies. Could I have a name sticker actually?"

I stick it on my clipboard, making a mental note to check the antibody tests later.

"The transport incubator is here."

The chief resident gently explains to the mother: her baby is fine, but we are bringing him to Intensive Care for breathing support. The resident signals to me – I raise the mask temporarily to reveal a scrawny pink face. The mother is tearful, but appears reassured. The midwife swaddles the baby in dry towels. She transfers him into the transport incubator. As we wheel out, the student midwife bags the cord blood sample. She shelves the antibody tests in the operating room fridge.

The blood remains there, decomposing, for seven hours.

In the ICU, I lay out my IV cannulation tray. My chief has left to review another patient in NICU. The nurses fasten the nasal mask. At thirty-two weeks' gestation, the neonate has minimal subcutaneous fat, and IVs are difficult. I spot a bulging vein in his right antecubital fossa. By some miracle, I successfully cannulate on my first attempt. The nurse helps me affix the IV line. I label the blood count and culture and chute them to the lab. At the desktop, I type my note in the mother's electronic chart.

Maternal History: 37yo, Croatian, G2P2. O negative. Rubella immune. Serology NAD. No known anti—

Wait.

She has known antibodies – she is anti-D positive. I look through her obstetric appointments. Her levels are just 1.7 at 14 weeks. But they increase with every appointment: 4.5, 5.8, 11.6... By 29 weeks, they climb to 16. I don't have a reference range, but that sounds high.

The baby's blood count returns: his hemoglobin is oddly low, 10.9g/dL, instead of the 15 or so we expect. Not low enough for a transfusion, but I take note. The cord blood type and antibody tests still aren't back. I add two fateful lines to his management plan. Two lines that will haunt me.

Await blood type and antibody screen. Observe for jaundice. It's 9:17 a.m., and I am shattered. I hardly ever sleep on call, but last night was exceptionally busy. Between replacing IVs, septic workups, and hypoglycemias... I am only catching up on paperwork now. In the resident's office, I blearily type my final delivery note. I get a phone call from my chief resident. His voice is terse. "Cormac, are you still around?" "Em, yeah? Why, what's up?" "... Just come to ICU." He hangs up. I have a sinking feeling in my stomach. I am struck by a cacophony of noise. Raised, frantic voices. Something is wrong. Very wrong. The consultant turns. "Did you send a bilirubin (a test that reflects the destruction of a baby's red blood cells) on that baby??" "Who...?" "The jaundiced baby!" Bathed in ghostly blue light, doctors and nurses crowd around an incubator. It is surrounded by more phototherapy lights than I have ever seen. Glaring from all directions: from above, from left, from right— "Did you send a bilirubin?" the attending repeats. Louder now, with a hint of frustration. "No, I didn't think...."

My voice trails off. I approach the incubator in trepidation. With the blue lights, I barely recognize him. I check and double-check the name on the incubator. It is him—the 32-weeker.

I usually have no problem sleeping after a 16-hour shift. But now I feel restless and uneasy. When I return to work the next morning, I feel hollow and tired. After finishing my first baby check on the postnatal ward, I look up the jaundiced baby's electronic record. A dozen clinical notes chart his progress. At seven hours of life, an urgent biochemistry test revealed a sky-high bilirubin of 180 from the antibodies attacking his blood. This is far above the phototherapy (light) treatment threshold of 55. More worryingly, it is well above the threshold of 105, which mandates replacing the newborn's blood with blood without antibodies. His bilirubin levels decrease dramatically with two doses of an antibody to the harmful antibodies and seven-light phototherapy.

The improvement heartens me. But I worry that his seven hours of untreated severe jaundice may have caused brain damage. According to today's notes, his neurological examination is normal. He is seizure-free. I can't shake the fear that I have condemned this child to a lifetime of cerebral palsy. I feel sickened and ashamed. I try to ignore these feelings. For the next week, I avoid the ICU. But at the next Morbidity and Mortality meeting, I found myself at the center stage of controversy.

Await blood type and antibody screen.

Observe for jaundice.

My admission note is blown up on the projector screen. My greatest mistake is exposed and magnified in front of my colleagues and consultants. In the packed audience, I silently wish that the earth would swallow me up. My neonatal chief resident recounts the clinical course, his tone calm and level. But the obstetricians are belligerent.

"I don't see how we did anything wrong."

"You knew about the anti-D. I'm just saying."

"It sounds like a neonatal problem you have here."

"I'm not here to point fingers."

But I feel the blame pointing squarely at me.

The following day, the neonatal head physician asks me into her office. She asks me to explain the events of the night. My heart sinks. I relate the story as best I can. She listens. She refrains from criticizing me. She underlines the importance of treating jaundice. With deliberate patience, she outlines the dangers of kernicterus, or neonatal brain damage. I think she is trying to make me feel better – but I feel worse. I feel stupid. I made a clinical decision. But I was wrong. The consequences could have been disastrous.

Over the next week, I enter a depressive spiral. I feel bad about myself, the world, the future. As a doctor, I ask myself, am I doing more harm than good? I think about leaving Pediatrics. Leaving medicine altogether. I picture myself in a grey cubicle farm, working in some quasimedical role.

An email notification pings on my smartphone: Case presentations requested for Basic Specialist Training Study Day. When I get home, I open Powerpoint on my laptop.

I know what I must do.

I start typing. The title slide reads:

My Biggest Mistake.

My case presentation concludes with a warm round of applause. The neonatal consultant marvels at the effectiveness of IVIG (an antibody against the anti-D) in treating severe jaundice. The pediatric consultant commends my candor in discussing my role in a case of medical error.

"Everyone loves to talk about the cases where everything goes right. But no one talks about when things go wrong."

A resident brings up the "Swiss cheese model" of accident causation. Audience members suggest different factors that contributed to the error. The electronic record that didn't flag high-risk obstetric patients. The obstetrician who didn't discuss the high antenatal anti-D levels with neonatology. The student midwife at delivery, who didn't appreciate the urgency of the blood tests. The neonatal chief resident who rubber-stamped the ICU management plan. I feel reassured that I was not solely to blame. After opening up to my peers, I feel like a weight has been lifted from my shoulders. It feels like confession. Like absolution. It feels like choosing hope over fear.

"You won't make this mistake again," the pediatric consultant begins.

He is right. Two years later, as a neonatal chief resident in the delivery room, I will clutch a blood test bottle with a vice-like grip. To my resident's bemusement, I will personally deliver it to the Hematology Lab.

"More broadly," the consultant continues, "What have you learned from this case?"

The audience murmurs quieten. I take a deep breath.

I could have highlighted the stakes of our clinical decisions. How our treatment successes and failures have a tangible impact on children's long-term health. How we learn from our mistakes. How we carry them with us to every new hospital and every new role. How they teach us humility. How to take ownership of our shortcomings. I could have admitted how we learn more from our failures than our successes.

Instead, I give a rambling answer about communication and clarification and asking for senior advice. The consultant doesn't seem fully satisfied with my answer. Neither am I. But that's the nature of regret. We can't change the past. But we can change our perception of the past. We can choose the lessons that we take. The mistakes that we carry.

Cormac Duff is a neurodevelopmental pediatric resident practicing in Dublin, Ireland. When not practicing medicine, Duff enjoys traveling and hosts a movie podcast with his wife.