

Shark attack: How docs saved boy's arm

By Porter Anderson

December 11, 2001 Posted: 10:31 a.m. EST (1531 GMT)



The 7-foot, 200-pound bull shark that attacked Jessie Arbogast on July 6 was wrestled to shore by his uncle, Vance Flosenzier.

(CNN) -- "I said, 'Oh, su-u-u-re. I've heard that one before.'"

It's even better when you hear [Dr. Ian Rogers](#) tell this aloud, his Irish dialect lilting with the happy ending of a now-famous 12-hour surgery.

"When they called me up and said, 'We've got an arm here, it's been bitten off by a shark, it looks good, it can probably be replanted' -- well I tell you, the people who give you that kind of information tell you that all the time. They don't know anything about the intricacies that go into it."

But the arm was 8-year-old Jessie Arbogast's. It had been taken off with remarkable efficiency by the 7-foot bull shark that attacked him on July 6 off Pensacola, Florida. It had been retrieved from the gullet of the shark when the boy's uncle wrestled the creature to shore.

"To my amazement," Rogers says, "when I went in, that arm was in good shape. Of course we had to agonize for a while as to whether we should put it on at all, given the state of the boy. But (a) he was stable, (b) his signs like his pupils were beginning to react and his kidneys were beginning to put out urine and (c) most of all, he's a kid. You never know how kids are going to do. Most of the time, they bounce back real well."

Almost three weeks after the attack, Arbogast is listed in serious condition and in what's termed a light coma. Doctors on Thursday say he has gone more than 72 hours without dialysis but his kidney function still is being monitored. Skin graft sites appear to be healing well and Arbogast continues to show slight neurological improvements daily, with his vital signs stable.

How much use of the arm Arbogast may have in the future remains to be seen. "But the parents requested we attempt to put the arm back on."

Rogers' specialty is microvascular surgery. He became the lead member of a hastily assembled team that repaired the bone in Arbogast's arm, used a metal plate to add strength to it, reconnected muscles, then arteries,

veins and nerves and then added skin to an arm now an inch shorter than it was before the attack.

"I've had similar challenges in the past," Rogers says, "but where the arm was not replantable this high up. I've done mainly fingers, hands, the far part of the forearm. But this is the first time I've had one that could be replanted at the mid-portion of the upper arm.

"Typically arms are taken off in this area where we live by 'PTOs' -- that's a power takeoff from a tractor. To drive a weed-whacker on the back of a tractor. The arm gets caught up, torn off, so you get an absolutely terrible injury altogether. The nerves are hanging out, there's nothing you can do.

"In this particular case, the nerves were nice and cleanly cut."

'This could be my little girl'

Arbogast had been flown to Baptist Hospital for his surgery by the area's only medical helicopter, named BaptistFlight and operated by the hospital. Within some 36 hours, spokeswoman Saranne Soule says, the boy could be moved to Sacred Heart Children's Hospital, which has a pediatric intensive care unit.

"There are very few times like this, but I had to tell myself, 'OK, settle down,' you know? 'Relax. Let's do our job and do it well.'"

This is a trauma specialist talking about his own trauma.

"I have three children," [Dr. Jack Tyson](#) says, "and one is a 9-year-old girl, almost the same age, same size. This was a little boy with his arm ripped off. Still had his little bathing trunks on, still had sand from the beach on him. And I love the beach. It was easy to say, 'This could be my little girl.'"

"A lot of people were feeling that in the room. Everybody did a good job. But you know how you can feel in a room when emotions are high? -- emotions were high."

Tyson works with The Surgery Group, a company of general surgeons in Pensacola. "My role in the Arbogast surgery was initial resuscitation and initial care of the patient. I took care of the leg wound" -- Arbogast was seriously bitten on his right thigh -- "and I assisted with the arm wound."

And what kind of resuscitation is given a child in coma?

"In his case, this meant putting in large-bore IVs, filling him back up with blood and fluids, giving him the appropriate medicines to get his heart started beating again and then going from there.

A third key physician, Dr. Juliet DeCampos, was the surgeon whose main focus was the preparation of the bone in Arbogast's arm.

"Neurologically, we had no idea from the get-go where he was going to be. We still don't know where he's going to end up. It's probably going to be a year before we can say, 'This is probably what we're going to get.'"

'Swim out there all the time'

Rogers and Tyson came together at the operating table from strikingly different career paths.

Rogers is a native of Ireland, the son of a bank manager who was moved every few years with his family among "towns so small," Rogers says, "you could hardly see them." After spending the largest part of his childhood in

Sligo -- in the northern part of the Republic of Ireland -- Rogers went to University College, Dublin, "moved to Toronto and interned there, and then started surgical residency in Hamilton, Ontario."

He'd already "heard the call of plastic surgery," he says, when the Canadian cold prompted him and his family to move to northern Louisiana. "I finished up general-surgery requirements in Jacksonville (Florida), then did plastic surgery at Tulane in New Orleans. When I was in my residency, microvascular surgery was catching on, as it were. So I went to Melbourne, Australia, for a year, did a fellowship there with Bernard O'Brien, one of the fathers of microvascular surgery."

Rogers has lived in Pensacola since 1986, while Tyson has been there only for a year.

Tyson is a Pennsylvanian who remembers "when I was growing up -- well, it sounds corny, but I wanted to help people." A biology teacher named Joe Profetta at Nether Providence High School in Wallingford, "instilled a real love for biology and life sciences in me."

"Then I went to Johns Hopkins with the idea of being a doctor. General surgery worked well with my personality, I found that I tend to make rapid decisions well under stress, and with general I could manage diabetes, I could manage heart failure, I can manage pneumonia and about 85 or 90 percent of common surgical problems."

In a residency at San Diego Navy Hospital, Tyson "did a lot with ATLS (Advanced Trauma Life Support), got the training and became a trainer in it."

Like Rogers, Tyson and his wife, a businesswoman, have three children. And the doctor laughs about his own family background: "I'm a black sheep -- my parents hate doctors, don't go to them. They're stingy, they've always been healthy and they don't like going to doctors. But they're proud of me" -- especially, he says, after the Arbogast surgery. "You know how parents are."

And for his part, Rogers -- whose wife is a nurse -- concedes he's looking at the water in his coastal Florida Panhandle city differently.

"I have three boys and we swim out there all the time. Swim in the water at the beach all the time. I probably still will ... "

Rogers' naturally rollicking conversation slows as he remembers an incident after the Arbogast shark attack and surgery. "One week later," he says, "they had the Blue Angels' show at the beach. We took the boat out and parked off the beach. There were probably 200 boats out there to watch the show. I was kind of amazed at the number of people who did not get into the water. Over a thousand people -- and there were probably 20 or 30 in the water.

"I mean I haven't started putting the net up in the shallow end of the pool yet. But that may come soon."

<http://archives.cnn.com/2001/CAREER/trends/07/26/shark.attack.surgeons.focus/index.html>

To see a graphic of how the surgery was done, visit

<http://www.usatoday.com/news/science/2001-07-26-shark-boy-usat.htm>