Separating the McDonald Twins

By Colin Bixler

The McDonald twins, Anias and Jadon, were born conjoined at the head, a medical condition referred to as craniopagus twins. At 13 months old, on Thursday October 13, the process began to separate the two boys. Although the boys were mostly healthy, their development was impaired and doctors had concerns about their brain development. Anias had previously had seizures, minor vision problems, and had to be fed through a tube into his stomach. Neither of the boys had the ability to walk or crawl, simply because it was physically impossible for them to do so. As such their parents, Nicole and Christian, had to make the choice to have surgery performed to separate the twins.

The surgeon was Dr. James Goodrich who had performed six previous surgeries separating twins conjoined at the head, out of a mere fifty-nine total surgeries done in the world to date. It’s a very rare condition, requiring very specialized treatment, making it even more difficult and tricky to master.

Dr. Goodrich performed surgery for over twenty hours, by first separating the twins, then having to piece back together each boy’s skull individually and ensure their survival. He was successful, despite the steepness of the task he had at hand.

The survival of Anias and Jadon is a massive medical feat in itself, in addition to being a huge relief and blessing to the McDonald family. In prepping for the surgery Dr. Goodrich and his staff have had to approach new ground at each step. They have crafted anatomically perfect models that map out everything from the shape of the twin’s head, to a map of every blood vessel within their small brains. Even then, they still didn’t truly know what they would find when they got into surgery.

The most shocking part of this isn’t necessarily the separation itself, it’s the knowledge that a team of surgeons, nurses, and specialists can even begin to approach the issue. In the past it was widely accepted by the medical community for the surgeon to do his absolute best to simply save one twin. It was considered impossible for both to survive, and if somehow they did it would be with one of the two having severe mental impairments. Death and/or mental disability was expected, unimpaired survival was not. Some of the techniques and equipment used in the McDonald’s surgery has never been used before in a surgery, even one of Dr. Goodrich’s previous six separations.

That’s not to say that the boys are out of the woods yet. There are still months of rehabilitation that have to occur and nothing is certain that they will come out unscathed. But it’s astonishing that medicine has reached a point where successes like this are a possibility, and not some fantasy. Medicine has experienced a technological revolution that is probably one of the major reasons the boys were successfully separated. 3-D scanning revealed the inner workings of the twin’s joined heads. Biomedical engineers working in Colorado were able to edit these images, in whatever way the surgeons desired, while simultaneously streaming them to the conference room for the team back in New York. In addition models were crafted for how to deal with each aspect of the boys’ brains. The whole process is a medical marvel.

Aside from technological revolution, there is a vast network within medicine making it possible for experts from all over the world to work together. Countries, hospitals, and doctors are all interconnected, and becoming more so each day. Medicine is at an all time high that has never been seen before.

It’s an exciting world out there for people within the medical industry. New developments are happening every day, making surgeries that are almost unimaginably intricate like the McDonald twins’ even more likely to end in success.

Sources

Drash, Wayne, and Dr. Sanjay Gupta. "New Life, Apart: Brothers Conjoined at Head Are in Surgery." CNN. Cable News Network, 14 Oct. 2016. Web. 16 Oct. 2016.

Dr. Sanjay Gupta, and Wanye Trash. "Conjoined Twins Separated and out of Surgery." CNN. Cable News Network, n.d. Web. 16 Oct. 2016.