Hydrocephalus is the primary condition treated at CURE Uganda, but before jumping into what it is, let’s rewind a little bit. There’s this thing called “cerebral spinal fluid” (CSF) floating around in the head and spine. It essentially acts as a cushion for all the important parts of the brain. Brains constantly produce fresh CSF while the old CSF drains before it’s reabsorbed into the rest of our body.

A few problems cause hydrocephalus, but they’re all related to CSF. When a CURE Uganda patient has hydrocephalus, their brain is either:

1. Making CSF faster than their brain can drain it,
2. Unable to drain CSF at all, or
3. Both – making too much CSF and unable to drain it.

For all three scenarios, hydrocephalus creates an environment of excess fluid inside the skull with nowhere to go and the head begins to swell up. This condition is most common in infants and children because their skulls are soft and still flexible. However, even with this flexibility, there is only so much fluid that can fit in a small space, and a dangerous amount of pressure can begin to build inside the baby’s skull. This pressure pushes the soft skull outwards, creating the enlarged head associated with hydrocephalus. But more dangerously, this pressure also pushes on the brain. If the pressure isn’t relieved, it can cause blindness, brain damage, and eventually death.

Hydrocephalus is a fatal condition without treatment. The preferred treatment is a surgery called an ETV/CPC, a two-part procedure:

1. The ETV (Endoscopic Third Ventriculostomy) goes into the baby’s brain and opens up a small hole through which the excess CSF can drain out.
2. The CPC (Choroid Plexus Cauterization) then goes in and decreases the amount of CSF the brain can make.
Between decreasing the amount of CSF produced and opening up a drainage pathway, the ETV/CPC is effective in treating many hydrocephalus patients. Patients like Divine, who developed hydrocephalus early on in her infancy. Thankfully, Divine’s mother, Teddy, knew about hydrocephalus and just how dangerous it could be. Teddy rushed Divine to their local hospital where they were referred to CURE Uganda, which is known throughout all of East Africa as specialists in the treatment of hydrocephalus. While at CURE Uganda, Divine received an ETV/CPC and was soon discharged home. We recently checked in with Teddy and Divine and Teddy bragged that Divine is not only alive, but walking, talking, and even singing - all things their family was not sure she would ever be able to do!

In the cases where an ETV/CPC is not possible or effective, the traditional way of treating hydrocephalus patients is the installation of a small pump or “shunt” in the patient’s brain. This shunt manually removes CSF from the patient’s brain and drains it outside the skull to be reabsorbed back into the body.

Overall, hydrocephalus is a serious condition that can be fatal for a child if it is not treated. CURE Uganda is internationally renowned in the treatment of hydrocephalus, and thanks to your support of the work done there, thousands of lives are saved from hydrocephalus every year!

To participate in life-changing and life-saving work, you don’t need to understand words like bilateral, ventricle, genu valgum, congenital, or cerebral-spinal fluid. But understanding the conditions CURE treats allows a deeper appreciation of how important your donation is to CURE.

To support a child’s surgery, [click here](https://cure.org/).