

November-December 2013

## THE CIRCLE OF WILLIS \*

by Lanny and Marilyn Johnson

Mr. Jones had just finished talking on the telephone to his father, who had been ill, when Mary asked, "Is Grandpa okay, Dad?"

"Yes, he is doing better now. He was just really tired all the time. His doctors thought something might be wrong with his pituitary gland, so they ran some tests on him."

A confused Billy asked, "What's a 'Poo-tarry gland?'"

"That's pituitary (*pi'too-i,te-ree*) gland, Billy," chuckled Mr. Jones. "It's a tiny little organ about the size of a pea located at the base of the brain. It makes special hormones or chemicals needed by the body, then it either puts them into the body through small tubes called ducts or by releasing them directly into the bloodstream."

"What did the doctors find?" asked Mary.

"They discovered that your grandfather has a small tumor growing on the pituitary gland," answered Mr. Jones. "Thankfully, this type of tumor is harmless and able to be treated."

"Your grandfather told me something very interesting. While running those different tests on him, the doctors found that there was no blood flowing to his brain through his left internal carotid artery. That artery was 100% or

completely blocked."

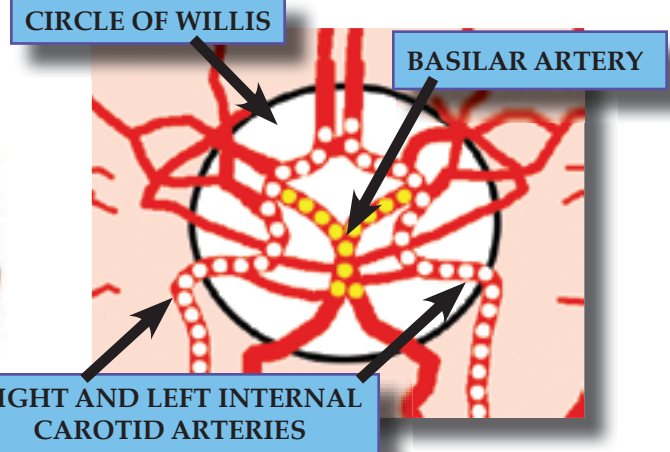
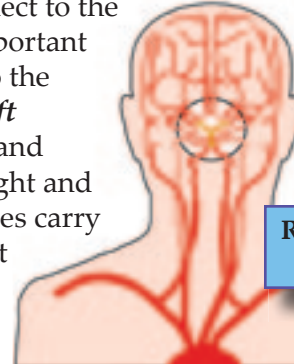
"Is that a bad thing?" asked Billy.

"Well, it certainly could be, Billy, if it wasn't for a 'Circle of Willis', which I will explain in a minute. But first, we need to understand that the brain is the body's most important organ, and it must have blood flowing to it at all times to work properly. If the blood flow to the brain is cut off, a stroke can happen, damaging or killing nerve cells in the brain, causing problems with a person's movement, speech and learning."

"Blood is carried to the brain and the rest of the body through blood vessels (like tubes) called arteries. Blood is first pumped from the heart into the aorta, the body's biggest artery, and smaller arteries connect to the aorta. The three most important arteries carrying blood to the brain are the *right and left internal carotid arteries* and the *basilar artery*. The right and left internal carotid arteries carry blood directly to the front and middle parts of the brain, and the basilar artery supplies blood to the back of the brain."

"But what about that circle thing, Dad?" Mary impatiently asked.

"Be patient kids, I'm not done with the story yet. When your grandfather found out about the blockage, he consulted two cardiology surgeons who took a look at some long scars on the left side of your grandfather's neck, which he has had since he was born. His mother had told him that he had been delivered with a 'high forceps' procedure to turn his little body at his birth. Those forceps (medical pincers) had damaged his head and made scars. The surgeons thought that Grandfather's left carotid artery was irreparably damaged and blocked at that time."



"Grandfather then asked the doctors, 'So, why have I not had a stroke and died? Why am I not a "half-wit"? The doctors told him none of that happened to him because of the Circle of Willis, which feeds blood around a loop to both sides of the brain. So even if one artery is blocked, the rest of the brain will still get the blood it needs."

"The older doctor said, 'We evolved this wonderful feature', and then he left the room. However, the other younger doctor told

your Grandfather, the Circle of Willis was designed that way by a wonderful Creator!."

"You see kids, both doctors were looking at the same tests, or the same evidence, and both were highly trained in the medical field, yet both had different ideas about where the Circle of Willis came from. The difference in their belief had to do with the 'glasses' they were wearing – evolutionary glasses or creation glasses. \* Grandfather and I both believe that it was designed by God, not by chance and accident!"

\* (see <http://discovercreation.org/kids/documents/KTBMarch-April2013.pdf>)

This story is based on a true account related to me by my friend Thornton Schwenk, P.E.

