

## HAND-EYE COORDINATION –THE TRIALS AND TRIUMPHS OF A LEFT HANDED SURGEON

by Paul M. Riley MD, FACS

“Dr. Riley, you don’t remember me. We were really impressed with you when you did your first surgical case at Parkview Hospital. Back then, I was your circulating nurse.” I had just met “Mary Jane” in the supermarket five years after I had retired from my surgical practice. After I returned from Swaziland at the end of December, 1982, I had started working with Surgeons, Dr. David Barton and Charles Brodhead in Riverside, California. My first surgery, at Parkview Hospital, was early in January, 1983. After working in Riverside for 19 1/2 years, I retired June 30, 2002. Now, five years after I had retired, a nurse had not only recognized me but had recalled my first operation twenty five years previously. I felt very flattered. I had finally got some recognition! But I was in for a big surprise!

“I don’t remember that surgery. What surgery did I do”, I asked. “Oh, I don’t remember the surgery or the patient;” Mary Jane replied. “But we were so impressed with you. When the patient was wheeled into the operating room a big green fly entered the operating room. None of us could kill it. But, when it flew near you, you caught it on the wing, left handed! We had never seen such good hand-eye coordination! We talked about you for years!”

The above encounter caused me to recall my neurological development. From an early age I felt different because I was left handed. I tried very hard to use my right hand for fine skills but I could never learn to master some skills. My mother watched me like a hawk! She would quickly snatch tools or pencils out of my left hand and place them in my right hand. I finally learned to write with my right hand but my writing was almost illegible. Later, when teachers would complain about my writing, I would say; “Don’t worry, I am going to be a doctor! All doctors write like this!” A teacher finally diagnosed my poor handwriting. I was thinking too far ahead. I was concentrating on other letters or words. But I kept practicing. My handwriting slowly became more legible! My parents were told that there was such public bias against left-handers that I must be changed to be right handed. Later, I saw a teacher snatch pencils from a student’s left hand. The student would be rapped across the knuckles every time he forgot and used his left hand. Even later, when I was in college, I found a good job with a Printing Business, but I was fired at the end of the first day, as soon as my boss saw that I was left handed. It is no coincidence that left is “sinister” in Latin and right is “dexter”. I still do not feel like I am a “sinister” person.

The more I tried to learn to use my right hand, the more I stuttered. No one but my family could understand me until I was over six year old. In medical school neurophysiology, I was told that when I was born, the right side of my brain was dominant. In trying to convert my brain, my speech center was changed from the right side to the left side of my brain. I stuttered so badly that people had difficulty understanding me. My older brother, David, tried to be helpful. He told people that I was speaking Dutch. On the ship, this once made me so angry that I pushed him when he was sitting on a bench. He went over backward and hit his head very hard on the steel deck. Maybe, this is why, later, he, at times, showed some rather odd behavior! Lately, the theory has been discounted, but in my case, I believe the original theory. My mom was my speech therapist. She and my dad had me repeat “She sells sea shells by the sea shore, Peter Piper picked a peck of pickled peppers”, etc. They were surprised, when, at an

early age, I suddenly started “reading” childrens’ stories. They did not know I had memorized the stories and could not read. I fooled several people.

When I was a child, on the Mission field, in South Africa, we often attended Church at our outstations so we could learn more Zulu. The Church services lasted for several hours. When I was younger I would lay down on the floor of the Church and go to sleep. The dirt floor was smeared with cow manure which had dried. On a week day I saw women smearing the church floor with cow mature. When I shook hands with these ladies on Sunday they had such beautiful soft skin. I got to love the smell of the dried cow manure. There was no glass in the Church windows so flies were everywhere. I saw them crawling all over the faces of sleeping babies. Some of the babies were being breast fed to keep them quiet. We would smile and wave at them. They would smile and wave back. They learned, very early, when they were awake, to shoo the flies away. The flies liked to sit on the benches in areas lit by rays of sunlight. I would sit in these areas and occupy my time by catching the flies. Smacking them would have distracted the preacher and the audience. I tried to use my right hand but never could develop enough skill to catch the fastest ones. But I could easily catch them with my left hand, even on the wing. At the end of Church I would have an impressive pile of dead flies. I heard about Misssionary Kids at another Church, competing, on Sunday, to catch the most flies. The loser had to eat all of the flies from the winner’s pile!

When, I was in my final two years of medical school, in Chicago. I would volunteer to assist the Interns in the Emergency room. I realized that I would be permitted to suture wounds if I had enough dexterity. Every night people would come in from drunken brawls, all sliced up with knives, or broken bottles. I obtained a lot of discarded surgical ties. Every night I would tie hundreds of knots on the bars of the metal headpiece of my bed. It was so easy to tie with my left hand. Using my right hand was too difficult. Yet it was easier to sew and use surgical tools with my right hand. In the emergency room I could sew faster than the doctors because I could keep the needle holder in my right hand while I tied with my left hand. Some nights, I would sleep in the Emergency room. The doctors were glad to have me help them, so they let me choose my patients. My future wife, Martha, when she visited me, where I was staying, at Olive Branch Mission, on Skid Row in Chicago, saw all the bars on the head of my bed “decorated” with strings of several thousand knots! She still talks about that sight! In my internship I was permitted to do surgery usually done only by residents. My knot tying ability also made the difference when I was chosen to be a Surgical Resident at Butterworth Hospital. Many doctors had applied for that position!

When I started working at the Mission Hospital, in Swaziland, any fly entering the operating room lasted only a few seconds. Three of the doctors who would give anesthesia for me only knew how to give open drop ether. They would use quick acting Ethyl Chloride spray on the ether mask and then switch to Ether. There was a well trained nurse anesthetist but I could use have her only on Wednesdays. The other days she was in Charge of the Nurses Home and a Surgical Ward. On Thursdays she was assigned to go to the Market and buy supplies for the Hospital Kitchen. When I was not there to catch the flies, the Ethyl Chloride spray was used on the flies. It would freeze them to any place where they had settled. If they were in flight their wings and feet would be frozen so they would drop straight down to the floor. When I was a boy, a doctor stopped a snake from entering his surgery. He froze its head to a concrete

step with the spray, then, he cut off its head with a scalpel! Later, when we had trained doctors and nurses giving anesthesia, the Ethyl Chloride disappeared from the operating room. I had to start catching flies again!

I thought I no longer had good hand-eye coordination but just a few days ago I plucked a fly out of the air catching it between my left thumb and index I finger. Not bad for a 78 year old geezer! But that probably was just been a lucky day for me.

All my life, I have had great difficulty concentrating in the right area. I would easily be distracted. I was often punished for unintentional acts. Other times I would be so focused that I would not see or hear anything else. I have even walked by family members without “seeing” them. Taking exams was such a struggle because usually my mind would be focused on another part of the page. Finally my parents recognized the problem. They started praising me for my good points and ignoring my mistakes. I also had some teachers who realized I was different and treated me with love and respect. They were able to adapt their teaching methods to help me. I excelled in their classes. In medical school I realized I had symptoms of attention deficit disorder but I refused to take medicine even through amphetamines were readily available. I was more interested in the subjects so could concentrate better on some subjects. I also have a very good long term memory. So I easily passed the final exams. Back then, many women were taking Dexedrine to lose weight. Others would take a capsule (spansule) or two, early in the morning, once a week. That day they were full of energy and would stay awake all day and most of the night and do a week’s work in just one day. The rest of the week their energy would be depleted for several days! When I took the Oral Exams for part 3 of the American Board of surgery exam my concentration was way off. So I took just five milligram of Dexedrine. This restored my focus so I could figure out the answers my examiners wanted. They liked to play the “Guess what I am thinking” game, which confused me, gave me too many options, and often led me astray!

While my mother was attending Teacher’s Training College in Kearney, Nebraska, she was told she did wrong by trying to change me to be right handed. Even though I stuttered so badly, for several years, that people had a hard time understanding me, my mother helped me be a better surgeon. With her interventions, I was able to use my handicaps to my advantage.

