

MAYO CLINIC TO THE RESCUE- 1977

by Paul M. Riley MD: FACS

I first met nineteen year old Reuben on the Medical Ward at RFM Mission Hospital in Manzini, Swaziland. I was a Surgeon serving under the Church of the Nazarene. I had been asked to see another patient when I noticed Reuben in the next bed. He looked very miserable. He kept trying to vomit but only a small amount of clear fluid would come up. He was dehydrated and very emaciated. He was unable to swallow his saliva and coughed continuously. His pillow and sheets were all wet with saliva.

I was told that several weeks previously, Reuben had become despondent after his girl friend left him. He drank a whole cup of caustic soda. (LYE!) It had burnt his stomach and esophagus. Finally he was unable to swallow! He was admitted to the hospital and intravenous fluids were started. The doctor kept telling Reuben that nothing else could be done for him. He already had aspiration pneumonia and would soon die. But then I told him that I might be able to help him.

Against his doctor's advice, Reuben asked to be transferred to my Surgical Ward. An electric Gomco suction machine was placed at his bedside so he could keep his mouth suctioned out. He was then taken to surgery. When I used a scope to examine his esophagus, I found that the middle of the esophagus was completely closed off. I was finally able to dilate the area to the size of a matchstick and pass a small infant feeding tube into the stomach. I tried tube feeding but none of the solution would go on into the duodenum. So Reuben was taken back to surgery and a small abdominal incision was made. I found that the lower stomach and upper duodenum had closed off completely. The strong stomach acid had been burning the areas in the stomach and esophagus already damaged by the lye! Some had been going down his windpipe, choking him and damaging his lungs! I had to make a side to side bypass between the duodenum and lower stomach. A large gastrostomy tube was inserted in the left side of his upper abdomen for future feedings. He was soon able to start putting on weight. I kept taking him to surgery and trying to dilate the stricture in the esophagus, but I could not make any headway. It looked like he would need the lower half of his esophagus replaced with a piece of bowel. Such an operation would be more dangerous and could have serious complications!

One Saturday I decided to go to a Bazaar at a local Church in downtown Manzini. On a table full of used books, a dog-eared paperback book caught my eye. The book was titled THE DOCTORS MAYO. I bought it for a few cents. The book told about how the two Mayo Brothers and their father opened their medical practice in Rochester, Minnesota, and how the world famous Mayo Clinic was started. Several names caught my eye. Dr. Mann (c.f. Mann-Williamson ulcers), the first pathologist at Mayo Clinic was the father of my friend, Joe Mann, the pathologist at Butterworth Hospital in Grand Rapids, Michigan, where I did my Surgical training. Dr. Plummer(c.f. Plummer-Vincent syndrome) was the first gastroenterologist. He had treated patients like Reuben. He had such patient swallow a long string, then he would pull the string back and forth using it as a "string saw" to cut the edge of the stricture and slowly open up

esophageal strictures that could not be dilated with a simple dilator. Maybe I could help Reuben. He agreed to be my “guinea pig”!

The next time Reuben was put to sleep, I was able to fish the end of the small feeding tube out of the hole for the feeding tube that was in the left side of his abdomen. The tube was attached to the end of a Foley catheter by a three inch long heavy silk thread. The small tube was pulled up past the stricture in the esophagus and the silk string was pulled up and down, sawing away at the ring of scar tissue. Once the end of the Foley catheter could be pulled up through the stricture, the balloon at the end was progressively inflated with water and pulled up and down through the stricture. There was hardly any bleeding. This process was repeated every few days until 30 cc of fluid could be used to inflate the dilating balloon. The string would only cut the constricting scar tissue. It would not damage the muscle or the inner lining of the esophagus. Finally no obstruction could be felt in the esophagus. Reuben was able to swallow normally. Both tubes were removed and Reuben was able to leave the Hospital. Subsequent examinations showed no recurrence of the stricture! Whenever some relatives and friends saw Reuben after he left the hospital they thought they were seeing a ghost. Some thought that he had been resurrected from the dead. Hospital staff would surround him praising the Lord! After all, a doctor had told them there was no hope for Reuben!

I am still amazed that I found the solution to a serious medical problem in a paperback book I found at just the right time at a Church Bazaar in Swaziland. I am also surprised that I had not been taught about Dr. Plummer’s “string saw” during my surgical training!

The same book told several stories about Dr. Charlie Mayo. He was quite an inventor. He had the first car in his city. His car was getting too many flat tires. With all the houses being built, nails seemed to be everywhere. Dr. Charlie decided to develop a self-sealing tire. He experimented and finally concocted a mixture of glue and molasses which he put in the tires. Through the fall and winter months his car had no more flat tires. Dr. Charlie was delighted with his invention. He even thought about getting it patented! But things proved otherwise!

Easter Sunday was a very hot spring day. A long line of horses drawn carriages were loaded with families dressed in their finest clothes. All were on their way to Church. Dr. Charlie had an emergency at the Hospital. He was known for his fast driving! As his car raced down the road passing all the carriages, the air was suddenly filled with what appeared to be clouds of cobwebs that slowly floated down and enveloped the horses and carriages. All the carriages and people were covered with a very sticky mess of glue and molasses that had been sealing the punctures in the tires. Few people were able to make it to church that Sunday. Several days later ladies were still trying to wash the gooey mess out of their hair and their clothes! New Easter Bonnets and dresses had to be discarded. Cleaning the horses and carriages took much longer! Dr. Charlie’s invention was short lived! He then decided that he would concentrate on his surgical career, and curb his inventive genius in other fields!

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