



改良式的主動脈根部重建手術  
可以保留病人自己的瓣膜。



主動脈廣泛性動脈硬化  
多處大硬化斑

Vs 謝世筆



主動脈瓣：  
三瓣式，退化，閉鎖不全。



AVR  
Ed-X-AC  
23mm

2017/06/06  
林 56% M.

Aortic  
Asymmetric dilatation  
of sinus of Valsalva.  
Marked thickening  
change and calcification  
of Aorta.



主動脈瓣置換術及冠狀動脈繞道術。  
主動脈瓣使用中心瓣膜。  
冠狀動脈繞道術則使用大腿的大隱靜脈。  
接置主動脈及冠狀動脈左前降枝。

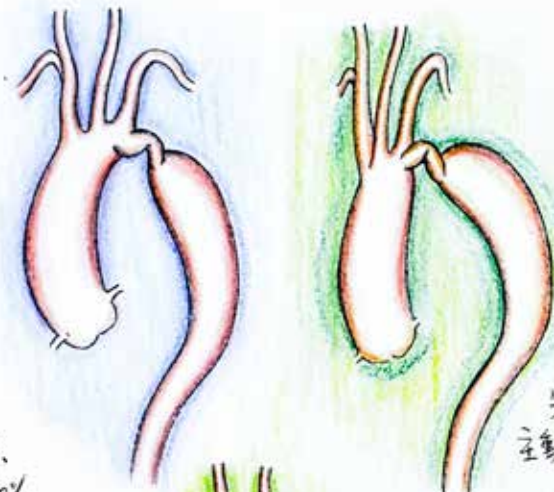
---

# Revealing the Secrets of the Heart

## Hand-drawn Illustration of Heart by Dr. Hsieh Shih-Rong

Hsieh Shih-Rong, Director of Cardiovascular Surgery at Taichung Tzu Chi Hospital, has been saving lives with his skilled hands during his 30 years of medical practice. However, all the illustrations he did for every surgery are both medical records and splendid work of art, an achievement unique in the field.

Hsieh Shih-Rong has made several records in the field of cardiac surgery. In addition to being the first surgeon in Taiwan to perform minimally invasive aortic and mitral valve surgery, Hsieh was also the first surgeon in Taiwan to perform an “open-heart surgical aortic valve and mitral valve replacement through a small incision” and an “open-heart surgical replacement of three cardiac valves through a small incision”. His surgical hand-drawn illustration is different from the usual surgical sketch, in which he uses the blank region of the medical record to draw in detail the entire surgical procedure, including the appearance of the heart and blood vessels, the suturing method, and the replaced vessels or cardiac valves; he would sometimes add complementary illustrations with pencil to show organ proportions, treatment lesions, and even the thickness and perspective of aneurysm.



先天性  
主動脈弓狹窄

先天性兩瓣式主動脈瓣，  
約佔全人口數 1.3%~2.0%。  
大多於 40 歲至 60 歲時，瓣膜  
已退化到危險的程度，需要  
手術治療。

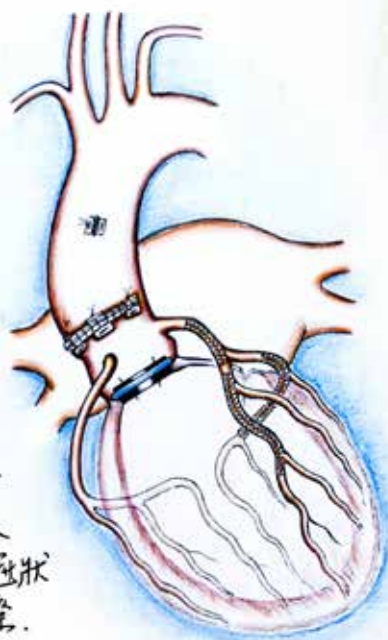


主動脈弓嚴重狹窄  
造成下半身血壓不夠，  
當腎臟的供應血  
壓不足會促使身體  
產生高血壓，則容易  
出現腦血管，導致主動  
脈病變，以及心臟  
衰竭的問題。

手術時也是將三條  
頭及手臂動脈出口  
往前移，以製造出  
一個可以使用的著陸區。



微創主動脈瓣  
置換手術



2019 年在台中慈濟  
醫院，手術的病人  
心臟上已有多支冠狀  
動脈支架的治療。

Reversed sleeve graft is a clear manifestation of Hsieh’s dedication to improve upon current heart surgery to make it simpler and safer for the benefit of patients. Because of the high failure rate of thoracic aortic surgery in the 1990s, he decided to roll the artificial blood vessel like rolling a sleeve, insert it into the aorta and pull it out after suturing. The technique works well in preventing post-suture bleeding and improved patient survival. The procedure was published in the journal “The Annals of Thoracic Surgery” in 2005, and is now widely used by physicians worldwide. All the illustrations in the journal are hand-drawn by Dr. Hsieh and are as exquisite as a textbook.

In the years of medical practice, Hsieh has drawn over a thousand surgical illustrations. No matter how many years have gone by, Hsieh Shih-Rong can perfectly recall the patient’s condition after seeing the illustration, because every picture is a story of a patient facing a tug of war of life and death, and he treats every patient with the compassion of a doctor.

---

## About the Illustrator

**Hsieh Shih-Rong** (in white robe), a native of Tugu, Yunlin, graduated from junior high school and went on to Taipei Municipal Jianguo High School. He later studied medicine at Yang Ming University and is now the director of Department of Cardiovascular Surgery at Taichung Tzu Chi Hospital. He has been training hard in calligraphy when he was small and is now an excellent calligrapher. He was invited to be the art editor for as many as six of his clubs in college. He found it “very simple” and accepted any invitation that came his way. Creative paintings with elegant writings, Hsieh has created numerous beautiful posters, and artistic creation has become his greatest hobby in his medical career. He is both a skilled surgeon and a talented artist who operate on patients and illustrate their surgeries with mindfulness.

