If one could not aspire to be a good statesman, he should be a good doctor

> FAN ZHONG YAN 989-1052 A.D. A loyal minister of northern song dynasty (960 – 1127 A.D.)

HUA TUO, THE FATHER OF CHINESE SURGERY

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HUA TUO, the Father of Chinese Surgery had for ages been deified as the God of Surgery. HUA was his surname. Tuo was his given name. He possessed another name called FU. When he grew up to 20 years of age, he had an additional designation YUAN HUA. HUA was a native of Qiao of the state of Pei. In terma of modern geography, Qiao is located in the country of Bo within the province of Anhui. He traveled far and wide in the present-day Anhui, Jiangsu and Shandong provinces. For his education and in later years for his medical practice. All we do know now is that he studied at Xuzhou. He was most diligent and industrious. He was well versed in the Chinese classics of the day. This was an attribute of most Chinese scholars.

The details of his youth were more or less shrouded in mystery.

A legend pictures him wandering among the hillsides while he accidently stumbled over a dilapidated old cavern. He stopped and heard voices commenting on his future career. Consequently he rushed in and talked to the

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old folks who were deeply absorbed in their discussion. He inquired as to what he should do to prepare for his medical apprenticeship which he had long meditated. One of the venerable old men quickly replied, saying that he should not discrimate between the high and the low, the rich and the poor, the noble and the common people. Furthermore; you must abstain from bribery, be ready

to face hardship and be kind and merciful to the aged as well as to the young. Therefore HUA TUO bowed respectfully and acquiesced with gratitude. He solemnly promised that he would faithfully remember their teachings. Finally the two wise men bequeathed an ancient manuscript to him and then disappeared from the scene. This story is most likely an imaginary one. It simply constitutes an epic of China's by-gone history.

In accordance to certain statistics Hua Tuo was born in 110 A.D. His birthday was supposed to be on the twenty-eighth day of the fourth month in the old Chinese lunar calendar. It was always a gala occasion when crowds of pious pilgrims jammed the temple grounds. The atmosphere would be supersaturated with fumes of joss-sticks, candlesticks, and incense. There might be some pedlars peddling their old wares. There might be snack bars catering their light but savory meals Herbs and other remedies were sold at 50% discount. Many doctors offered free service to their patients for one or two days. Nevertheless the twenty-eighth day of the fourth month need not necessarily be the real birthday of the Father of Surgery. It could have been just the festival of a number of celebrated doctors in old China collectively.

Through his skill and reputation the way was widely open for him to join the influential political circle or to become a literary scholar. Nevertheless he chose to dedicate his life and his all to help the sick and wounded and to train and bring up successors for the healing art. He neither craved for fame nor for wealth. General CAO CAO of the Kingdom of of Wei who happened to be his fellow-country-man, fully recognized his talent and attainment. The general who later was crowned king appointed him as his personal physician. But, he did not willingly accept it.

Once the royal patient suffered from headache, perhaps trigeminal neuralgia as we would diagnose it today. HUA treated him with the time-honored acupuncture procedure. Presto: with a single puncture of the shining silver needle the sharp gnawing pain immediately subsided.

Somehow or other CAO considered Hua's temperament too adamant and unyielding. The latter did not even wish to hold a dignified post under the former. Under the pretext that his wife was ill, he stayed away at his home. Repeated summons failed to persuade him to return to his office. Cao declared: "If his wife is really sick, give 40 'hu'? of small peas and let him extend his leave of absence. If it is false, he will be arrested and be brought to justice."

In his senescene, HUA TUO being a nonagenarian fast approaching his centennial mark appeared active, hale and hearty. He was able to prance about gaily and vigorously so that people considered him an immortal or celestial being.

² I hu was equivalent to 10 dou. I dou = 1 decaliter.

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On the other hand, being impetuous and impervious to reason, CAO CAO determined to do away with the poor old victim. Angrily the supreme monarch shouted: "Never mind, the world will not miss such a rat!"

Periodically Cao suffered from recurrent attacks of headache. He gradually suspected Hua did neither treat him fairly nor whole-heartedly. He purposely avoided the use of specific remedy or radical cure on him. On the contrary Hua was actually seriously contemplating of performing a craniotomy on him to relieve his distress. One day HUA frankly told his patient what he proposed to do. King Cao, seemingly to be afflicted with delusion or persecution ordered Hua to have his head chopped off. Consequently the wicked ghost terminated the benevolent mission of our great sage at the age of 97.

After a lapse of almost 2,000 years we do not know the exact date of his birth nor the anniversary of his decapitation. Formerly in the Chinese literature we used to name the anonymous date either "lucky day" or "evil day". Here we can say for sure that HUA TUO was born on a lucky day in 110 A.D. and expired on as evil day in 207 A.D.

Some time after his death, Cao's beloved child fell sick and soon passed away. Cao repented and sighed. He mourned sadly over the loss of his child as well as the great physician. He cried out saying, "My son, CANG SHU would not have died, if I had not killed HUA TUO".

Shortly before the capital punishment was pronounced, Hua Tuo tried to offer his medical manuscripts to the warden. The latter fearing involvement in trouble, flatly refused acceptance of the papers. In a fit of anger, the victimized burned to ashes all his own writings. Thus came to extinction a portion or our invaluable medical heritage.

Hua Tuo taught that diesases which existed inside the body and were not accessible to herbal medication nor to acupuncture or moxibustion, a form of effervescent powder should be administered, preferably with the addition of some wine. When the patient became unconscious, laparotomy was then performed. The surgeon would withdraw the excessive accumulated matter from the abdomen. If the accumulation was in the stomach or intestines, these ware cut open, irrigated and cauterized or resected. They were subsequently sutured and a plaster was applied to the abdominal wound. The healing occurred in four to five days. The patient was completely recovered in about one month.

Let me cite briefly some of Hua's case histories. 1. A male adult suffered from sharp cutting pain in the abdominal region for more than ten days. Within ten days the eyebrows and moustache dropped off. Hua made the diagnosis of gangrene of the spleen and advised operation immediately. After giving the patient a dose of effervescent powder, he opened his abdomen and found half of the spleen gangrenous.

He did a careful excision. The wound was closed and was covered with plaster. It healed in due time, 2. A cart pusher suffered from acute pain of the abdomen. He had to flex both of his legs high up. His voice sounded very weak and his pulse beat fast. He was diagnosed acute appendicitis. As usual he was given effervescent powder for anethesia. He did an emergent appendectomy on him. He also removed some of the diseased tissue. In less than two months the patient regained his health perfectly. 3. Once HUA met a young man on the roadside with obstruction of his throat. He could not swallow any food. He was in desperate agony. Hua Tuo stopped and examined him. He made the diagnosis of parasite obstruction of the esophagus. He asked the patient not to be frightened. He directed him to take 150 gm. of mashed garlic mixed with half a bowl of vinegar orally. After a while the led vomited a long worm. Hurray! his throat became cleared. 4. A lame man hobbled awkwardly, came to see Hua Tuo. Hua removed all his clothes. He marked tens of spots on his back, each being either one inch or half an inch apart. They were deposited as straight as a plumb-line. The doctor then applied ignited cones of artemesia (commonly called mugwort) over the labeled spots. When the scorched area got healed, the man simply strode proudly ahead.

HUA TUO is remembered as a famed surgeon primarily because of his expert accomplishments in the field of general surgery. If here were not the discoverer of anesthesia, he was at least the first person in this world to use narcotic effervescent powder plus wine. He was undoubtedly a clever diagnostician. He was also an able therapeutist. It is a great pity that his prescription of effervescent powder was lost in the mists of time. We in China have many other old formulae on anesthetics. Usually they include herbs like Datura, Hyoscyamus, Rhododendron, Aconitum, Seposhikovia, etc. In accordance with the Japanese works, 1805 A.D., the prescription of effervescent powder consists of the following six ingredients: Datura, Aconitum, Angelica citriodora, Angelice sinensis, Ligusticum wallichü, and Arisaema consanguineum.

HUA TUO was also the first exponent of systematic exercise. In his discussion with his disciple, WU PU on the value of exercise to health, he stressed that exersice promotes blood circulation, stimulates expiration and inspiration, helps digestion, and so prevents sickness. In terse and lively language, he expounded that our body metabolism resembles "running water (which) is never stale end a door-hinge (which) never gets worn-eaten." Furthermore he invented a system of exercise which was known as "Frolic of Five Animals". It was a modification of the early gymastics of the primitive tribes of the prehistoric period. Its five movements are called. 1. the tiger; 2. the deer; 3. the bear; 4. the ape; and 5. the bird.

³ According to the incomplete description of the worm, I have a hunch that it was Taenia solium or Taenia saginata that he vomited.

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Among Hua Tuo's disciples, WU PU and FAN A were the most outstanding and brilliant ones. Wu was particularly skilful in surgery and materia medica whereas Fan's expertise was in acupuncture. Like their teacher, both of them led a very long life. Wu lived to more than 90 years of age while Fan survived to more than 100. In the medical field as well as life in general they followed their master's footsteps closely.

Give one's all till one's heart stops beating

Zhuge Liang (181 - 234 A.D.) Statesman & Strategist (221 - 264 A.D.)

Summary

This is the story of Hua Tuo, the father of Chinese surgery.