

Together Forever:

The Life and Death of Chang and Eng



By Lawrence Segel, MD

They were the most famous conjoined twins the world had ever known. Chang and Eng were born on May 11, 1811, in Siam (now Thailand), to Nok and Ti-eye, a fisherman by trade. They were delivered on a bamboo mat inside a small houseboat, floating on the Mekong Delta, south of Bangkok. When word of the births reached the court of Siam's King Rama II, he decreed they were a bad omen and wanted them put to death. Despite his initial threat, the king visited the twins and was satisfied they were not evil. He therefore withdrew the decree. His life-saving action put them on the road to fame and they would eventually be known as the Siamese Twins. The term would be coined as a layperson's definition for conjoined twins.

Throughout history, conjoined twins have appeared in myth and legend. The Greek and Roman god Janus had two faces, one young and one old. Centaurs, also a part of Greek mythology, were a combination of man and horse, who might have been inspired by conjoined twins with four legs. One of the earliest recorded cases of conjoined twins was Mary and Eliza Chulkhurst, also called the Biddenden maids (*circa* AD 1100). They were named after the town

Dr. Segel is assistant vice-president, medical research and development, Manulife Financial, Toronto, Ontario.

in Kent, England, in which they were born. The twins were joined at the lower back and buttocks. After the death of one, doctors wanted to separate them, but the surviving twin stated: “As we came together, we will go together.” She died a few hours later.

Chang and Eng were joined by a six-inch band of tissue at the xiphoid. It initially had them face-to-face and doctors advised it would be too risky to cut the joining tissue. Early in their lives, however, they were taught to stretch the tissue so they could stand side by side. The twins learned to walk, run and wrap their arms around each other to roll down hills. Chang was on the twins’ left and was one inch shorter than Eng. Chang was described as the dominant twin, while Eng was considered more quiet, retiring, but with wider intellectual interests.

At the age of eight, a cholera epidemic wiped out six of their family’s eleven members, including their father. Chang and Eng took over the role of breadwinner and became fishermen and, later, merchants.

The 18-year-old brothers left Siam in 1829 at the urging of Robert Hunter and Abel Coffin, visiting British traders, who saw profit in their uniqueness. Their mother was promised \$3,000 for the use of her sons at exhibits. She was paid \$500 up front. That was all she ever received. Their travels included a tour of the U.S., including cities such as New York, Richmond and Philadelphia. They also visited France, Germany and Britain. They played to the crowds by standing on stage and demonstrating



This plaster cast was made after the twins died. Marks from the autopsy incisions are clearly visible.

how they talked, walked, ran, did somersaults and back-flips. Eventually, they added a badminton-like game that especially pleased British audiences. Admission was often as high as 50 cents. Wherever they went on tour, doctors would examine them in order to satisfy their own medical curiosity. People would gather around the doctors, thereby giving the twins free publicity. The consensus medical opinion was always that they could not be separated. Even Professor Rudolf Virchow, the father of modern pathology, felt separation would be fatal.

Chang and Eng retired in 1839, at the age of 28, with \$10,000 in savings. They moved to Traphill (a community in Northern Wilksborough), North Carolina, where they bought 150 acres of land for \$300 and became U.S. citizens. They needed a last name (they were not given one in

Siam) and took on the surname Bunker, the name of a friend they had met in New York City.

In 1843, the brothers fell in love with two sisters, Adelaide and Sarah Yates, daughters of a local minister. At this time, Chang and Eng thought about separating themselves, however, the doctors once again advised against it. This was before X-rays or sophisticated surgical techniques existed and no one knew exactly what was contained in the band of tissue holding them together. Chang married Adelaide and had 10 children and Eng married Sarah and had 11 children. At first they all lived in one house with a bed big enough for four people. The sisters' constant bickering, however, led them to move into separate houses in White Plains, North Carolina. Chang and Eng stayed in each other's house for three days at a time while the sisters maintained separate homes.

In later years, Chang turned to whiskey and became an alcoholic and, in 1870, suffered a stroke. His right arm and leg were paralyzed. His physician, Dr. Joseph Hollingsworth, devised a way for them to move around with a crutch and strap attached to Chang's paralyzed leg. Eng's vice was carousing at all-night poker games.

On January 17, 1874, Chang died during the night at the age of 63. When Eng awoke and saw his dead brother, he apparently screamed: "Then I am going!" Sarah quickly sent off for Dr. Hollingsworth, in the hope the two could finally be separated. Unfortunately, the healthy Eng began complaining of pain in his limbs, became stuporous, lapsed into a coma and died within hours of Chang, before Dr. Hollingsworth could arrive.

Chang and Eng were eventually buried in the graveyard of an old Baptist church in White

Plains, North Carolina, but not before an autopsy was performed by Dr. William H. Pancoast and Dr. Harrison Allen in Philadelphia. Their findings were reported in *Surgery, Gynecology, and Obstetrics* (now called the *Journal of the American College of Surgeons*). Although the autopsy was inconclusive, they felt Chang died of vascular difficulties associated with his stroke, perhaps a blood clot in the brain during the night. But what was the cause of Eng's death? The doctors concluded he died of fright!

The cause of Eng's "frightful" death was also attributed to another, more physiologic cause by a man by the name of Nash, an aide at the autopsy. He felt Eng bled to death because the flow of blood from Chang to Eng, through the connecting ligament, ceased when Chang died. Eng's blood continued to be pumped into Chang, but none was pumped back by the dead brother's inoperative heart. This reduced Eng's blood volume. According to Nash, Eng literally bled to death through the connection to his brother's non-functioning body.

We do know that the autopsy showed the twins' livers were connected by a ligament that contained some peritoneum and the hypogastric artery and vein. The vascular connection between the two may have been sufficient to allow Eng's blood to drain away over the two to four hours it took him to die.

Chang and Eng would leave the world the same way they entered it. Not even in death would they part!

Suggested Reading

1. Alexander E Jr: The original Siamese twins. We know why Chang died, but why did Eng? *N C Med J* 2001; 62(2):66-8.
2. Luckhardt AB: Report of the autopsy of the Siamese twins together with other interesting information covering their life. *Surg Gynecol Obstetr* 1941; 72:116-25.
3. Chichester P: A Hyphenated Life.
<http://blueridgecountry.com/newtwins/twins.html>