Chang and Eng Bunker (1811?1874) [1]

By: Bahjat, Mudhaffar

Ch?ng (Chang) and ?n (Eng) Bunker were conjoined twins [2] in the nineteenth century in the United States, the first pair of conjoined twins [2] whose condition was well documented in medical records. Conjoined twins are a rare condition in which two infants are born physically connected to each other. In their youth, the brothers earned money by putting themselves on display as curiosities and giving lectures and demonstrations about their condition. The Bunker brothers toured around the world, including the United States, Europe, Canada, and France, and allowed physicians to examine them. Due to the popularity of their exhibition and their origin from Siam (later called Thailand), they became known as the Siamese twins, a term that was used to describe conjoined twins [2] in general until the twentieth century. During their travels and, later, with the autopsy they received, the Bunker brothers provided insight about the development of twins and conjoined twins [2].

Chang and Eng Bunker were born on 11 May 1811 in Meklong, Siam, as conjoined twins [2] to parents Nok and Ti-eye. Their father was a Chinese born fisherman. At birth, Chang and Eng were connected at the breastbone by a small piece of cartilage, a type of connective tissue. As infants the connective tissue caused the brothers to be positioned face to face. However, their mother encouraged them to exercise in their youth, and the tissue stretched until it extended long enough for them to walk side by side. Chang was positioned on the left and Eng was on the right, from their own point of view. Apart from their fused liver, each of the brothers had a complete body and separate organs. Chang was one inch shorter than Eng, and wore lifts in his shoes to make up the difference. They had seven siblings who were not conjoined, four older and three younger. The Bunker brothers lived near a river, and as they grew up, they learned to walk, swim and operate a boat together. As children they contracted and survived the smallpox virus. In 1819, when the Bunker brothers were eight years old, their father died of cholera, an infectious bacterial disease. After his death, the brothers began working in cocoa bean oil manufacturing to support their family. They later left oil manufacturing to travel as merchants and raised ducks for their eggs.

In 1824, Chang and Eng first met the British merchant Robert Hunter. According to authors Irving and Amy Wallace, Hunter recognized the financial potential in exhibiting the twins, and gained permission from the twins, their mother, and the king of Siam to take the twins out of Siam. The authors also mention that the twin?s mother received financial compensation from Hunter because Chang and Eng could not support her during their travels. Hunter worked in a partnership with Abel Coffin, the captain of a trading vessel, and they agreed to share the profits earned from the exhibition of the Bunker brothers. On 1 April 1829, the twins started their travels aboard the trading vessel with a 138-day journey to Boston, Massachusetts. Chang and Eng started to learn the English language along the way.

Upon their arrival in Boston, Chang and Eng were exhibited to the public for a fee, which they received a percentage of. In the exhibit, the brothers performed demonstrations and showed the audience how they were physically connected. According to Kay Hunter, a descendant of
Robert Hunter who was present on the vessel, the exhibition was successful and received significant attention. The twins started to do summersaults, backflips, and added acrobatic performances to make the show more entertaining. The twins also included badminton, chess, and checkers in their performances.

During their stay in Boston, Chang and Eng attracted the attention Joseph Skey, a doctor of the British Army who was staying in Boston. Skey gained permission from Hunter and Coffin to conduct a few simple experiments on the twins and examine their physiology and motor responses. Skey performed his examination multiple times by entering the twins’ room at night, and touching one of the twins. Skey observed that touching one of the twin caused both of them to wake up at the same time. John Warren, a professor of anatomy and surgery at Harvard Medical School in Boston, Massachusetts also examined Chang and Eng. Warren observed that the twins’ heartbeats and respiration were synchronized and that they shared the same habits and tastes. Warren published a paper in which he confirmed that the twins were conjoined and that they moved in harmony rather than pull on each other when moving. Warren was also among the first to note that Chang and Eng had distinct personalities and different characteristics.

In October 1829, Chang and Eng traveled to London, England, and had a successful exhibit there too. In London, different physicians examined them, including George Bolton, who gave a report on the twins to the Royal College of Surgeons in London, England, on 1 April 1830. The report included information on their general physical characteristics, including height and weight. Bolton also talked about the firmness of the fleshy band that connected the twins and noted that the twins did not experience pain when the band was extended. Bolton also reported that the organs of the twins functioned separately, which he concluded by examining the urine of each twin after giving them odorous foods. Because the brothers were born in Siam, physicians and journalists began referring to them as the Siamese twins.

In 1831, Chang and Eng traveled back to the US, to New York City, New York. At that time Hunter sold out his share of the exhibit to Coffin. Chang and Eng ended their partnership with Coffin a year later and started to tour on their own. During that period, they contacted and worked with the showman and circus manager Phineas Barnum in the US. They traveled to Cuba in 1835, then to Paris, Belgium, and the Netherlands. During their travels, Chang and Eng continued to attract the attention of many physicians. Those physicians experimented on the twins either to verify that the brothers were conjoined, or to determine what was shared between the twins. Some of those experiments included tests to determine if the twin’s nervous systems were connected and whether alcohol affected both twins when only one of them ingested it.

In the 1830s the twins returned to New York City and became naturalized citizens of the US, taking the family name Bunker. In 1839, Chang and Eng purchased a farm in Wilkesboro, North Carolina, and purchased about thirty slaves to help them operate the farm, a common practice at the time. Soon after establishing their farm, Chang and Eng met the Yates family, who were also farmers. They began courting two of the Yates sisters. On 13 April 1843, Chang married Adelaide Yates and Eng married Sarah Yates.

At first, the Bunkers and their wives lived in the same house and shared a reinforced bed built for four people. After three years, Chang and Eng built two separate houses near Mount Airy, North Carolina. The wives each had their own house, while Chang and Eng alternated
between the houses every three days. According to the ethnic literature writer Holly Martin, Chang Bunker and his wife had ten children, while Eng and his wife had twelve children. Others report different numbers. None of the Bunker children were conjoined twins. During their time in North Carolina, Chang and Eng still traveled on exhibit, sometimes accompanied by their children. By that point in their lives, the Bunker brothers had consulted multiple doctors to seek surgical separation, but they were informed that the operation would be fatal.

After the American Civil War and the Emancipation Proclamation, which ended slavery in 1862, Chang and Eng were no longer able to keep their slaves and could not run their farm on their own. The brothers started doing more public exhibitions, traveling to Germany and Russia. According to Martin, the twins toured until they were over sixty years old, and they continued seeking opinions on surgical separation, because they feared what would happen if one of them died.

Chang Bunker died on 17 January 1874, from a cerebral blood clot and his brother Eng Bunker died three hours later. After their deaths, a professor in Pennsylvania, Harrison Allen, performed an autopsy on Chang and Eng. Allen examined in detail the physical connection between the twin, including the length, angle, and materials of the connective tissue that held the twins together. He found during the autopsy that each of the brothers had their own separate organs, but they shared one fused liver. Because of the tests and medical examinations that the Bunker brothers allowed during their lives, and the autopsy after their deaths, Chang and Eng provided insight about the rare conjoined twin condition. After the autopsy, the twins' liver and a plaster cast of their torso was transferred to the Mutter Museum in Philadelphia, Pennsylvania.

Sources

medical records. A conjoined twins is a rare condition in which two infants are born physically connected to each other. In their youth, the brothers earned money by putting themselves on display as curiosities and giving lectures and demonstrations about their condition. The Bunker brothers toured around the world, including the United States, Europe, Canada, and France, and allowed physicians to examine them. Due to the popularity of their exhibition and their origin from Siam (later called Thailand), they became known as the Siamese twins, a term that was used to describe conjoined twins in general until the twentieth century. During their travels and, later, with the autopsy they received, the Bunker brothers provided insight about the development of twins and conjoined twins.

Subject


Topic

People [14]

Publisher

Arizona State University. School of Life Sciences. Center for Biology and Society. Embryo Project Encyclopedia.

Rights

Copyright Arizona Board of Regents Licensed as Creative Commons Attribution-NonCommercial-Share Alike 3.0 Unported (CC BY-NC-SA 3.0)
http://creativecommons.org/licenses/by-nc-sa/3.0/

Format

Articles [15]

Last Modified

Wednesday, July 4, 2018 - 04:40

DC Date Accessioned

Monday, January 22, 2018 - 17:59

DC Date Available

Monday, January 22, 2018 - 17:59

DC Date Created

2018-01-22