Conjoined Twins - A Genealogical Study

George B. Callahan, Roy C. Mitchell

Beautiful and brilliant, content and capable, skillful and successful, these and multiple other adjectives may be used to describe persons on a family tree of Eng-Chang, the original Siamese twins (Fig. 1). These men chose the State of North Carolina for homes, and are considered among its most renowned citizens. They had some of the above characteristics and their descendants shared others.

Data upon six generations of Eng-Chang families — some verified by their 1836 pamphlets, others as recent as 1969 court records in their county residence — are shown in the following table:

Generations	Sex			T . 1
	ð	Ŷ	?	Iotal
I	I	I		2
II (Eng-Chang)	5	2	2	9
11	8	12		21
V	46	34	3	83
V	46	45		91
/I	33	28	6	67
Total	139	123	II	273

Data available August 1969.

Fig. 2 shows second and third generations in family groups made in the summer of 1865. Nine of Eng's 11 children are shown; 2 had died young. Likewise, 9 of Chang's 10 children are seen; one was born in 1868, as certified by Edinburgh's famous Prof. James Y. Simpson (1869). Two sets of twins, not joined, are recorded in their descendants. Though some members on this family tree are difficult to certify, the data available in these six generations are by far the most comprehensive found. Chromosome and other genetic studies are being initiated and pursued in anatomy departments of American and Thai Medical Schools.

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Acta Genet. Med. Gemellol. (1970), 19: 213-216

Normalcy of joined twins being fertile is illustrated by Eng-Chang many times. Female child bearing the sole example found, while still joined, is shown by Rosa's son, aged 12 when the pygopagus Blazek Bohemian sisters died in 1922 (Bland-Sutton, 1922; Breakstone, 1922; Perlstein et al, 1927). Descendants of the Philippine (Gedda, 1961) male twins survive in their country, though both fathers died at their separation. Daisy and Violet Hilton oldest female set each had a husband and divorce without record of pregnancy. They died of influenza near 61 years, January 1969. One hundred years before, in February 1869, Simpson had "seen" Eng and Chang both suffering under influenza.

The many successful separations, in the past two decades, of varying types of conjoined twins, resulting in the survival of one or two normal or near-normal individual(s), give the students of conjoined twins an unique challenge, these next decades ahead, to seek and record marriages, offspring, and genetic data. Malformations of the conjoined twins have been, through the ages, the main cause of interest, pity, shame, curiosity, exhibition, exploitation, fear of ill omen, that led to expulsion or destruction of the children who survived delivery. "Photographs were made and sold to the curious", on order of a brother, as the Blazek sisters lay in state (1922). Some remained conjoined by choice, while others died still seeking separation, as did Eng-Chang (Bland-Sutton, 1929). The "double monstrosity" is an embryonic accident, an anomaly of junction, which may be surgically removed today.

Le Beau (1773) has recorded the earliest data in the realms of Romanus and Constantine VII 945 A.D., when Armenian conjoined twins were in Constantinople exhibited as curiosities. Upon his death, one twin was separated from his brother, who lived three more days.

Sem (1963), reporting his work with Nitya, Callahan and others at Women's Hospital, Bangkok, stated Thailand (Siam) had been known for its Siamese cats and Siamese twins (Eng-Chang). Regarding the twins, however, his hospital and surgical records are acclaimed across the world. Here, in November 1954, Callahan delivered the first in Siam live Siamese twins (Fig. 3) by cesarean section (Callahan, 1966; Callahan et al, 1966). The conjoined twins shown in Fig. 4, sent from that hospital to the University of Chicago Clinics, were the first to survive major liver separation in 1955 (Dragstedt, 1957). Subsequently, two sets of xipho-omphalopagus twins, each with common livers, were successfully separated in 1956 and 1962 (Sem and Nitya, 1963). Five of the six twins still live (one of set II died of atelectasis on the 10th p.o. day), able to mature, marry, become parents and die, all in dignity as individuals. Other successful surgeries, many of them first in their category of type or location, include:

	Florence	Carrai, 1952
Xipho-omphalopagus	Memphis	Wilson et al, 1965
	Capetown	Luow and Cywes, 1967



Fig. 1. Eng and Chang (Courtesy of Chicago Historical Society)



Fig. 2. Eng-Chang families 1865. (Original on files GBC. Courtesy of Mrs. H. C. Steinhoff, Chicago)



Fig. 3. Siamese twins Wandee and Sriwan with nurse Jiraphon (Bangkok, 1954)



Fig. 4. Nurse with Napit and Prisna

Acta Geneticae Medicae et Gemellologiae

Pygopagus	New Orleans Philadelphia Turin	Ochsner, 1953 Koop, 1961 Solerio, 1965
Craniopagus	Chicago Bethesda Bonn Paris	Sugar et al, 1953; Voris et al, 1957 Baldwin and Dekaban, 1965 Rottgen, 1966 Duhamel, 1966

The healthy findings of these children — some now growing into adulthood — show the importance of our continuing attention and study, both for them and their descendants.

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G. B. CALLAHAN, M. D., 4 South Genesee Street, Waukegan, Ill., USA.