Health Care Achievements
Twenty (20) Conjoined Twins Operations in Saudi

Introduction

The Kingdom of Humanity reaches out across geographical and cultural barriers to aid those in need regardless of race, color or beliefs. These principles prevail under the leadership of The Custodian of the Two Holy Mosques, King Abdullah bin Abdulaziz Al Saud whose acts of benevolence clearly show his compassionate and generous nature. This is evident by his sponsorship of numerous conjoined twins separation cases from all over the world.

To date Twenty (20) sets of conjoined twins have been successfully separated in the Kingdom of Humanity under the sponsorship of King Abdullah bin Abdulaziz Al Saud and the experienced Multidisciplinary team headed by Dr. Abdullah Al Rabeeah, Consultant Pediatric Surgeon and Chief Executive Officer, National Guard Health Affairs.

The benevolence and fatherly nature of King Abdullah bin Abdulaziz Al Saud has touched the lives and hearts of these disadvantaged families by enabling their children to lead a more normal life.

Conjoined Twins in History

Historical References to Conjoined Twins

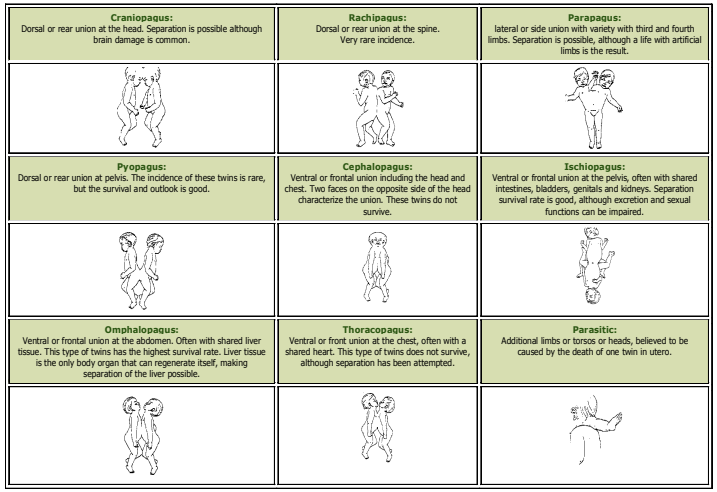
- AD 945: There is a reference to Armenian omphalopagus twins.
- 1100-1134: Eliza and Mary Chulkhurst, who came to be called the 'Biddenden Maids' were pyopagus English conjoined twins. In their home village little cakes imprinted with their image are distributed at Easter.
- 1538: There is a record of omphalopagus twins born in Switzerland.
- 1811: Chang & Eng Bunker, the famous 'Siamese Twins' were circus performers who later became successful farmers, married and fathered many children.
- 1878: Rosa and Josepha Blazek were talented Bavarian violinists, joined at the sacrum (pyopagus twins).

Early Attempts at Surgical Separation

- 1495: In Germany, when one craniopagus twin died an unsuccessful attempt was made to remove it from the living twin.
- 1689: The first successful twin separation was performed in Basle, Switzerland on girls joined by a ligament at the sternum (xiphopagus twins). A constricting band was used.
- 1899: Brazilian sisters Maria and Rosalina were separated at the age of 8 and both survived.
- 1957: The first successful separation of craniopagus twins was performed by Dr. H.C. Voris.

Twins Types

While there are dozens of types of conjoined twins, doctors generally divide the types into the more common variations described in the chart below. All of these types can be more broadly categorized as displaying either equal and symmetrical forms or unequal and possible asymmetrical forms.



Ethical and Religious Considerations

Are conjoined twins considered to be one person or two people?
Is the request of their parents to separate them enough reason to proceed with surgery?
What is considered to be the highest acceptable medical risk when separating twins?
Should a weaker or life-threatened twin be sacrificed in order to save the life of the stronger twin?

Accepted Medical Policy:
In the case of two complete twins, each of which has the full complement of vital organs (brain, heart, lungs, etc.) the sacrifice of one twin is not medically permitted. When a parasitic twin is present which endangers the life of the complete twin, the parasitic twin can be removed to allow the complete twin to live.

Questions about Personhood:
Two complete conjoined twins: Each of these twins has all vital organs. They are considered to be two persons and would be good candidates for separation.
Semi-complete conjoined twins: These twins have separate heads and hearts and share other bodily organs such as a pair of legs, a kidney or the liver. They, too, are considered to be two persons and may be separated.
Incomplete conjoined twins: Dicephalic twins (where two heads grow from the shoulders of one body) are not considered to be safely separable, even though they are two people, so they must live life as a unity.
Parasitic twins: In some cases of conjoined twins, one baby is born completely developed and viable, and the other twin is incomplete to the degree that it will die when separated from its sibling. Often a parasitic twin has no brain or only a rudimentary nervous system, or it may appear - externally or internally - as additional limbs or organs and so may be removed.

Experimental Operations:
Thermal coagulation can be used to atrophy a parasitic twin in the womb.
In critical cases, separation of a parasitic twin from a healthy twin can be performed in the delivery room before the umbilical cord is cut.

Questions about Conjoined Twins and Abortion:
How soon can conjoined twins be diagnosed?
Is it possible to abort conjoined twins in the first trimester of pregnancy?
What steps are taken in the decision whether or not to abort conjoined twins?
What are the religious opinions of the parents about abortion?
Is abortion legally permitted in the parents' country?

Accepted Medical Policy:
If, by the tenth week of pregnancy, medical diagnosis confirms that conjoined twins have severe congenital defects which are incompatible with normal life and health, the most humane choice for the mother, other relatives and the twins themselves is considered to be early abortion.

Incidence Of Conjoined Twins In Saudi Arabia

Conjoined Type:

Type	Number of Cases
Thoracopagus	17
Omphalopagus	5
Thoraco-ompalo-ischio-pagus	17
Ischiopagus	3
Parasiticus	4
Pyopagus	1
Craniopagus	1
Country	Number of Cases
Saudi Arabia	27
Sudan	6
Yemen	2
Egypt	2
Malaysia	1
Philippines	2
Polish	1
Morocco	2
Iraq	2
Cameroon	1
Oman	1
Syria	1

Abdulaziz Alharbi
Saudi Students House of Pittsburgh