

Craniopagus (Double Skull)

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Abstract

Craniopagus twins are conjoined twins who are fused at the cranium. This condition occurs in about 10-20 babies in every million births. Among this small group, cephalic conjoining, or craniopagus twinning, represents the rarest of congenital abnormalities only accounting for 2-6% of all conjoined twins. Additionally, conjoined twins are genetically identical and always share the same sex. The union in craniopagus twins may occur on any portion of the calvarium, but does not include either the face or the foramen magnum. The union may involve the entire diameter of the head or only a small portion. There are an infinite amount of variations that can occur. Most of these variations are based on the rotation of one twins' skull to the other. Each of these factors (rotation, spot of union) affect the development of the brain, the vascular system within the brain and overall wellness of life both of the twins have outside the womb. Relatively few craniopagus twins survive the perinatal period- approximately 40% of conjoined twins are stillborn and an additional 33% die within the immediate perinatal period, usually from organ abnormalities and failure.

Keywords: Conjoined twins; Craniopagus type; Medical and social issues.

Introduction

Conjoined twins are one of the most interesting issue since ancient time to till today. It is challenge not only to medical fraternity but also to social, legal, ethical, moral and familial grounds. Till today this problems are unclear in concerned cases. This is a small effort to highlight such problem in regard to a radiological picture of Craniopagus type of it.[1]

Article

Conjoined twins are identical twin joined in

utero. A rare phenomenon, the occurrence is estimated to range from 1 in 50,000 births to 1 in 200,000 births with higher incidence in Southwest Asia and Africa. The overall survival rate for conjoined twins is approximately 25%. The condition is more frequently found among females, with a ratio of 3:1.[2]

Types

- 1) Thoraco-omphalophagus-joined at chest and or abdomen-74%
- 2) Thoraco- phagus-joined at chest- 40%
- 3) Omphalophagus-joined at abdomen-34%
- 4) Pyrophagus-joined at buttocks-18%
- 5) Ischiopagus- joined at ischium-6%
- 6) Craniopagus-joined at head-2%

Etiology is based on either of one following theory-the fertilized egg splits partially or a fertilized egg completely separates, but stem cells find like-stem cells on the other twin and fuse the twins together. Conjoined twins share a single common chorion, placenta, and amniotic sac. In short there is incomplete

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anatomic separation between monozygotic twins which occurs sporadically with no risk of occurrence in further pregnancies.[2]

Craniopagus type (cephalopagus)

These are conjoined twins united at the

heads. Fusion occurs at the frontal, occipital, or parietal region. This may involve the entire head or only a portion and may include the meninges, venous sinuses and the cerebral cortex. These twins may be facing the same direction, opposite direction or 90° from one another.[3]

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