

Pygopagus Twins: A Neurosurgical Perspective of the First Separation Surgery in Eastern Africa

Susan W Karanja MBChB, FC Neurosurg SA; Peter Kitunguu MBChB; Omar Nassir MBChB; Christopher Musau MBChB, MMed (Surgery); Julius Kiboi MBChB, MMed (Surgery); Nimrod Juniahs Mwang'ombe ChB, MD, PhD, MMed(S)

Introduction

Conjoined twins have historically been a source of fascination and superstition depending on the culture they are born into. The incidence is reported as being 1 in 25,000-100,000. The incidence of conjoined twins in Kenya is not known due to poor records and incompatibility of this condition with life. Pygopagus twins represent 18-28% of conjoined twins. Pygopagus twins usually share no organs except the distal rectum and vagina which allows for an easier separation. This form of conjoined twinning is also compatible with a normal life span provided no other congenital malformations exist.

We present a case report on the first separation of pygopagus twins in Eastern Africa highlighting on the neurosurgical management of the children.

Methods

A case report of the first ever separation of pygopagus twin separation in Eastern Africa.

Results

Pygopagus conjoined twin girls were born at term in a peripheral facility in Kenya. They were referred at one month of age to a tertiary teaching and referral hospital in stable condition where they remained until they were separated. Imaging revealed a common dural sac with shared sacral nerve roots. A 3D model of the bony anatomy was used during planning of the separation surgery. The separation surgery was performed at 2 years of age by a multidisciplinary team with the neurosurgical aspect of the surgery being highlighted.

Conclusions

Pygopagus twins remain a rare phenomenon and are a challenge to manage. A multidisciplinary team with one coordinator is required to help manage these cases optimally. The lack of adequate resources to manage these cases is still a challenge in developing countries but with careful planning this challenge can be surmounted.

Learning Objectives

-Multidisciplinary approach with meticulous planning will help mitigate the challenges in successful surgical separation in developing countries