

World Neuro 2017: Craniopagus parasiticus: Parasitic head protuberant from temporal area of cranium, a case report - Getachew Desta Alemayehu, Bahir Dar University

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Craniopagus parasiticus is an uncommon clinical case and it is extraordinary not normal for different cases detailed from various writing. The head of parasitic twins is distending from the fleeting region of skull. Parasitic head had two distorted lower appendages; one is excessively simple joined to the mass; long bones of two-sided lower appendages and some pelvic bones. After analyzation of the mass, the digestive tract was seen yet no chest organs and other stomach organs. There was a rudimentary labium but no vaginal opening. In resource-limited countries, maternal age or nutritional factors may play a role in craniopagus parasiticus.

Case Presentation:

A 38-year-old multigravida (gravida V para IV) woman of Amhara ethnicity was referred from a health center to our hospital due to prolonged second stage of labor at 42+1 weeks. She felt that her pregnancy did not differ from her previous pregnancies. She had been taking injectable contraception for 2 years. She had no family history of any congenital anomalies. She had four healthy live births at term and all are healthy. She had antenatal follow up for four visits where she was screened for human immunodeficiency virus (HIV), syphilis, hepatitis B virus (HBV), and for diabetes (only a random blood sugar test) but not sonographic screening. She received tetanus vaccination and iron supplementation. She did not take any other medication during her pregnancy. She presented to our hospital after laboring for approximately 35 hours both at home and at the health center. She was evaluated on arrival at our hospital; she had contraction, term-sized gravid uterus, and fetal heart beat was 112. On digital pelvic examination her cervix was fully dilated, the station of the head was high, and the pulsating umbilical cord was in front of the presenting part with ruptured membrane, which indicated a difficult transvaginal delivery. For this reason, the team rushed for emergency cesarean section. A cesarean section was done under general anesthesia and a live baby girl weighing 4200 g was delivered. The placenta was single and normal. Her Appearance, Pulse, Grimace, Activity, and Respiration (APGAR) scores were 7 and 9 at 1 and 5 minutes, respectively. She appeared to be grossly normal except her parasitic co-twin was attached at the temporal area of her cranium. Her twin was an incidental finding and during the difficult extraction her left uterine artery was severed and repaired.

Surgery was performed to the baby 1 week after her delivery after the necessary investigation and preparation was done. The parasitic co-twin was totally excised in the operation that took

approximately 6 hours. Her postoperative period was smooth and uneventful; she comfortably suckled on the breast well. She was transfused with a calculated two units of fresh whole blood. Two weeks after the surgery she was discharged healthy with an arrangement for postnatal follow up. After separation, a pathologic examination demonstrated that skin covered the body of the parasitic twin. The parasitic twin had two deformed lower limbs, one of which was rudimentary. After dissection of the mass of the body, the intestine was seen but there were no chest organs or abdominal organs. The long bones of the bilateral lower limbs and some pelvic bone were seen in the limbs of the parasitic twin. There was also a rudimentary labium but no vaginal opening.

Conclusion:

In conclusion, the causes of craniopagus parasiticus are still unknown due to a rarity of cases and the limited number of studies on it. There have been only nine or ten cases of craniopagus parasiticus, of which only three survived past birth and were documented in the literature. We hope that genetic scientists and researchers continue to investigate this case because they might find explanations of the birth defect, and provide answers and improve the prognosis and the life chances of twins with craniopagus parasiticus. In our case, the baby girl is in good health and suckling breast milk after a successful separation was performed. The possible etiologies of craniopagus parasiticus still unknown due to a rarity of cases. Doctors, genetic scientists, epidemiologists and researchers continue to investigate this case as the reasons that could give clue to birth defect and to provide answer for better prognosis of cases and improved the life chances of the twins. This case will have some input in the effort to know the etiology and pathogenesis of this new-born.