

**CONJOINED TWINS PRESENTING AS HAND PROLAPSE IN A RURAL HOSPITAL  
: A CASE REPORT.**

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**Abstract**

Conjoined twin pregnancies are so rare and may be ones in a life time experience. Therefore there is so much to learn from each case. We present a case of male thoraco-omphalopagus conjoin twin, Nigerian that presented as a case of hand prolapsed diagnosed only after caesarean section. Both twins were stillborn. Conjoined twin pregnancy is a rare occurrence and may pose some obstetric challenges. Since many congenital defects can now be detected before birth, this place high importance in antenatal care and pre-natal diagnosis as to determine mode of delivery and early termination of pregnancy when the anomaly is not compatible with life.

**Keywords: pregnancy, conjoined twins, obstetric challenge.**

**Introduction**

Conjoined twins are monozygotic, monoamniotic, and monochorionic and may result from failure of normal complete separation of the embryonic plate, incomplete or delayed division of the inner cell mass. This is thought to occur around 13 - 17 days of gestation.<sup>1</sup>

There is a higher incidence of congenital malformations in conjoined twins (10 - 20%) which are unrelated to the point of fusion.<sup>2</sup>

The prognosis for conjoined twins in general is quite poor. Approximately 40 - 60% of conjoined twins are stillborn and almost

35% of live births do not survive beyond 24 hours.<sup>3</sup> Of those who do survive, surgical separation is sometimes possible but challenging with high mortality, depending on the complexity of shared structures.<sup>3</sup> The identification of a dividing membrane or two placentas excludes the diagnosis of conjoined twin sonographically.<sup>4</sup> Definitive sonographic features of conjoin twin will depend on the type of fusion.<sup>5</sup>

The prevalence of conjoined twins ranges from 1: 50,000 to 1: 200,000. They are more common in parts of Southeast Asia and Africa with prevalence rates as high as 1: 14,000 to 1: 25,000.<sup>6</sup> There have been

previous reports from Nigeria of conjoined twinning; the incidence of conjoined twinning in our country is unknown.<sup>7,8,9</sup>

Separation of conjoined twins is a complicated procedure. Although the outcome is influenced by careful planning and organization from all participants, the prognosis is often predetermined by the underlying anatomy which may preclude successful separation.<sup>10</sup> The prognosis for conjoined twins in general is quite poor. Approximately 40 - 60% of conjoined twins are stillborn and almost 35% of live births do not survive beyond 24 hours. Of those who do survive, surgical separation is sometimes possible but with higher failure rates if performed within the first 3 weeks.<sup>11</sup>

#### Case Presentation

A 30-year-old G<sub>5</sub>P<sub>4</sub><sup>+1</sup>A<sup>2</sup> unbooked Nigerian mother, of the Hausa- Fulani tribe from a rural community in Tambuwal, Sokoto State Nigeria, presented to General Hospital

Tambuwal with one day history of labour pain. She had no antenatal care (ANC). Abdomen was grossly enlarged, symphysis-fundal height (SFH) was 36cm, lie was transverse, foetal heart sound (FHS) was absent. On vaginal examination; cervix was 4cm dilated with hand and cord prolapsed; there was no pulsation on the cord on palpation. An assessment of transverse lie with hand and cord prolapsed was made and patient had an emergency caesarean section and delivered of conjoined twins. The combined weight of the conjoined twins was 3.85 kg.

Clinical examination revealed two heads. There was a single thorax (partially separated above), with four independent upper limbs, single abdomen, single umbilical cord, two complement of genitalia and two anus as well as four independent lower limbs.



**Figure 1:** Showing the conjoint twins.

### **Pathology**

Autopsy to determine the extent of the joined portion and to determine the detail of other organs of the twins was rejected by both parents given cultural and religious reasons.

### **Embryology**

Conjoined twins may result from later incomplete fission of the monozygotic embryo during embryogenesis (fission theory) or due to secondary union of two originally separate monovular embryonic discs (fusion theory). This is thought to occur around 13 - 17 days of gestation.<sup>12</sup>

### **Discussion**

The prognosis for conjoined twins in general is quite poor. Approximately 40 - 60% of conjoined twins are stillborn as seen in the index case. Almost 35% of live births do not survive beyond 24 hours. Majority of the pregnant women in the rural area of the Northern part of Nigeria do not attend ANC, and most time present to the Hospital when labour is complicated. Therefore, prenatally diagnosis of conjoined twins is rare and only present at birth, as in the case of our patient. With the current antenatal screening tests carried out in developed countries and well established centres in the urban areas of Nigeria, many congenital defects of interest can now be detected before birth which may warrant termination of pregnancy, when the lesion is severe and incompatible with postnatal life.

In a study of conjoined twins Spitz concluded that one third of those born alive have severe defects for which surgery is not possible.<sup>13</sup> Similarly, Golladay *et al* observed that surgical separation is feasible only when the upper portions of the trunks are sufficiently separate to provide a stable rib cage for each infant.<sup>6</sup> We agree with these authors because the clinical, radiologic and morbid study of our twins showed that separation was impossible. Cesarean section is recommended in most of the cases of third

trimester deliveries because of the high incidence of dystocia with resultant fetal damage.<sup>14</sup> In this case the patient was also delivered by Cesarean section.

### **Conclusion**

Conjoined twin gestation may present as difficult labour and high index of suspicion is needed to make intra partum diagnosis especially in un-booked patient. This case emphasizes the need for ANC with prenatal ultrasound monitoring of high-risk pregnancies in order to determine the nature of the perinatal management required. When serious malformations that are incompatible with postnatal life are diagnosed early enough, the family has the option of terminating the pregnancy. Therefore, there is a need to improve our health care delivery system to make such services available and accessible to all our pregnant women in the rural areas. Similarly, it is important to educate the women and their spouses on the need for proper ANC.

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