# The conjoined twins of Gusau, Nigeria

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#### Summary

A case of Thoracopagus conjoined twins complicated with rupture of the uterus is presented. The patient was admitted after a prolonged second stage of labour. Diagnosis was made at laparotomy. Problems in diagnosis are discussed and the benefits of antenatal care and confinement under skilled supervision are emphasised.

Keywords: Conjoined twins, Thoracopagus monster, Ruptured uterus, Laparotomy

#### Résumé

Il s'agit d'un cas compliqué de thoracopagus de jumeau conjoint avec la rupture de utérus. Le patient a été hospitalisé après la deuxième étape prolongée. On a fait la diagnose à travers la laparotomie. Des problèmes durant la diagnose ont été discutés et on avait attiré l'attention sur les avantages des soins anténataux et accouchement sous la surveillance d'un spécialiste.

#### Introduction

Conjoined twins are very rare. The exact incidence of this anomaly is unknown because most of them end in aborting or still-births and hence may not be recorded. However, estimated incidence in the literature ranges from 1:50,000 to 1:100,000 births and 1:400 pairs of monozygotic twins. <sup>2-4</sup>

The two types of conjoined twins are the diplopagus in which both members are approximately equal in size and joined symmetrically to each other and the heteropagus in which one member, the autosite is normal or nearly so and bears an incomplete member, the parasite which is completely dependent on it. The diplopagus conjoined twins is the best known type as the majority of the cases reported so far belong to this group.

This report presents a case of thoracophagus conjoined twins encountered at the Federal Medical Centre, Gusau, Nigeria.

Although the exact cause of conjoined twins is unknown, the available evidence suggests that these are incompletely separated monozygotic or identical twins.<sup>8</sup>

## Case report

H. M. a 38-year-old Gravida 11, para 8 + 2 was admitted in labour due to prolonged second stage. She had had eight previous uneventful home deliveries under the supervision of traditional birth attendants. All the babies were described as being normal. There was no family history of twinning.

Her present pregnancy, like the previous ones was completely unsupervised. She arrived in hospital after having been in second stage for over six hours and the fetal head failed to descend despite attempts by traditional birth attendants to effect delivery.

Physical examination upon admission revealed an exhausted, dehydrated and moderately pale woman with a temperature of 38.4 degrees centrigrade. Her pulse rate was 100 beats per minute and the blood pressure was 90/60 millimetres of mercury. The abdomen was markedly distended and tender with a positive fluid thrill. The normal uterine contour was absent and fetal parts were easily palpable beneath the abdominal wall.

Vaginal examination revealed a fetal head outside the introitus but closely applied to the perineum in right occipito-anterior position. There was trickling of blood out of the introitus.

A diagnosis of ruptured uterus probably due to shoulder dys-

tocia was made.

Accordingly, a decision to perform an emergency laparotomy after adequate resuscitation of the patient was taken. Venous blood samples were immediately withdrawn for an urgent packed cell volume estimation, grouping and crossmatching and serum urea and electrolytes estimation.

An indwelling Foley's catheter was passed and urine sample obtained for urinalysis. She was commenced on intravenous fluids:- normal saline alternating with 5 percent dextrose-in-saline at the rate of 1000 mls every six flours. Intravenous ampiclox 500 milligrams every six hours with intravenous metronidazole 500 milligrams every eight hours were administered. She was also given intravenous antitetanus serum 1500 I. U. start after a test dose.

Her packed cell volume was 20 percent, the blood group was 'O' rhesus positive, the serum urea was slightly elevate (7.2mmol/L) but the electrolytes were within normal limits. Her urine had a trace of acetone but no sugar or protein. She was transfused with two points of fresh whole blood pre-operatively.

At laparotomy, the findings were a haemoperitoneum of about 2000 millilitres. An oblique rupture of the anterior wall of the uterus extending from the left cornu to the lower uterine segment about 4 centimetres short of the dome of the bladder. A thoracopagus macerated conjoined twins, both female with the lower limbs and the breech of one of the members extruded into the peritoneal

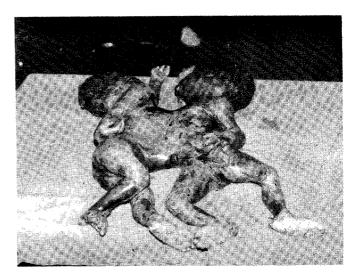


Fig. 1 Thoracophagus monster

cavity through the site of rupture. The conjoined twins were easily extracted through the site of rupture and the placenta (a large monochorionic placenta) was manually delivered. The uterus was repaired in two layers and bilateral tubal ligation effected. The patient was transfused with a third pint of blood intraoperatively. The combined weight of the babies was 4800gms.

The patient's post-operative period was uneventful and she was discharged on the eight post-operative day.

### Discussion

Conjoined twins are rarely encountered and very few obstetricians are confronted with thoracopagus twins in their professional life.<sup>6</sup> The birth of conjoined twins is therefore still received in various parts of the world today with emotions.

The antenatal diagnosis of conjoined twins is uncommon. Although an antepartum diagnosis of twins is often made, the fact that they are conjoined is usually not determined until late in gestation or during parturition.9-10 The diagnostic modalities available for antenatal diagnosis of conjoined twins include radiography, ultrasonography and magnetic resonance imaging. Of these, radiography was the principal diagnostic modality formerly used in antenatal evaluation of conjoined twins, Gray and associates,11 established a list of criteria for antepartum diagnosis of conjoined twins: (1) the heads are at the same level and body plane; (2) the spines are in unusual proximity; (3) the spines are unusually extended; (4) the fetuses do not change position relative to each other after movement or manipulation. Ultrasonography and magnetic resonance imaging are relatively newer but are more accurate modalities for antenatal evaluation of conjoined twins. In fact, Apuzzio et al, 12 reporting a case of prenatal diagnosis of conjoined twins found the fourth criterion of Gray and associates to be most important but superceeded by ultrasonography in prenatal diagnosis of conjoined twins.

The present case like most of the previously reported ones was diagnosed during delivery. In an environment such as ours where majority of pregnant women do not avail themselves of antenatal care despite the availability of these diagnostic modalities the chances of antepartum diagnosis of conjoined twins is very remote. For even in advanced societies where situations are ideal only a few cases of conjoined twins have been diagnosed prenatally.<sup>12</sup>

Except where labour occurs prematurely or the fetuses are macerated, vaginal delivery is virtually impossible in conjoined twins as obstruction is inevitable. Few cases have however been reported in which vaginal delivery was possible in cases of thoracophagus twins presenting as vertex at term. The more common mechanism of labour described in these cases is that one of the heads is born first and the other occupies the space between the chin of the first twin and its chest. The second head is then expelled with the help of traction on the first and the two bodies are then delivered simultaneously.<sup>3,13</sup> In the case presented, one of the head was born but vaginal delivery was not contemplated because of evidences of ruptured uterus. Accordingly, laparotomy was performed. Occasionally, where the uterus is intact vaginal delivery may be achieved by destructive operations (Craniotomy, decapitation or evisceration) to diminish the fetal bulk as reported by some workers.4,6,14

Aird,<sup>15</sup> has remarked on the prominence in Nigeria of conjoined twins. The implication of this is that it behoves on all obstetricians practicing in our environment to have a high index of suspicion and to carry out a complete antenatal evaluation of cases of twins pregnancies.

These twins, like the heteropagus conjoined twins of NDU Sule, Nigeria<sup>16</sup> are also of special historical interest because they come from Sokoto province which was the home of the first reported Nigerian conjoined twins separated by McLaren in 1935. <sup>17</sup>

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#### References

- Milham S.: Symmetrical Conjoined twins: An analysis of the birth recorded of twenty two sets. J. Paediatr. 1966; 69:643.
- Ellis J W, Keith L G and Keith D M.: Conjoined twins. Curr Prob. Obstet Gynaecol. 1983; 6:55
- Mudalier A I.: Double monster a study of their circulatory system and some other anatomical abnormalities and the complications in labour. J. Obstet. Gynaecol. Br. Emp. 1930; 37:753.
- Myerscough P R.: Fetal Macrosomia. In: Munro Kerr's Operative Obstetrics. Tenth edition, Tindall, London 1982; pp117.
- Nichols B L.: Conjoined Twins. In: Bergma D. (ed) Birth Defects Compendium. Second edition The National Foundation\_March of Dimes. Macmillan, New York. 1979; pp251.
- Grover V, Chawla R and Mishra S L.: Management of conjoined twins. Int. J. Gynecol. Obstet 1990; 31:67-69
- Bankole M A, Oduntan S A, Oluwasanmi J O, Itayemi S D and Khwaja S.: The conjoined twins of Warri, Nigeria. Arch Surg. 1972; 104:294-301
- Hamilton W J.: A note on the embryology of twinning. Proc. R. Soc. Med. 1954; 47:682
- Padilla M, Chin A J and Padilla T.: Cardiovascular a mormality in thoracopagus twins. Teratology. 1981; 23:101.
- Viljeon D and Beighton P.: Obstetric implications of conjoined twinning. J. Obstet. Gynaccol. 1984; 4:233.
- Gray C M, Nix G H and Wallac A J.: Thoracopagus t vins: prenatal diagnosis. Radiology, 1950; 54:398.
- Apuzzio J J, Ganesh V, Landau I and Pelosi M.: Prenat: I diagnosis of conjoined twins. Am. J. Obstet. Gynecol. 1984; 1:343–344.
- Shaw C C, Brumbaugh B B and Novey A.: An anator ical and clinical study of a thoracopagus monster delivered alive at full time. Am. J. Obstet. Gynecol. 1934; 27:655.
- 14. Roxborough A N.: Conjoined twins. Br. Med. J. 1946; 572
- Aird I.: Conjoined twins further observations Br. Med. J. 1959; 1:1313.
- Mabogunje O A and Lawrie J H.: The heteropagus conj pined twins of NDU Sule, Nigeria. Clin Pediatr. 1978; 17:11; 861-863
- 17. McLaren DW.: Separation of conjoined twins. Br. Med. . 1936; 2:921.