GIANT SACRO-COCCYGEAL TERATOMA

(A Case Report)

by

KAMALA SIKDAR,* M.B.,B.S., D.G.O. (Cal), M.R.C.O.G.

and

N. N. ROY CHOWDHURY,** M.O., Ph.D. (Cal), F.R.C.S. (Edin), F.R.C.O.G., F.A.C.S.

Sacro-coccygeal teratomas are very rare tumours of the embryo mostly encountered at birth. Some of the large tumours may give rise to dystocia.

The earliest description of such a teratomatous malformation in the sacrococcygeal region was made on a Babylonian tablet about 2000 B.C. (Levy and Linder, 1968). It was noted that a woman gave birth to a girl with three legs, two in expected positions and the third in between them which was looked upon as good omen for a great prosperity of that land.

The incidence of such a condition varies between 1 in every 32,000 to 1 in 40,000 births (Dillard, *et al* 1970; Calbet *et al* quoted by Gross *et al* 1970).

A case report of giant sacro-coccygeal teratoma has been presented here.

CASE REPORT

Mrs. G.S., aged 27 years, Para 2 + 0 was admitted on 5-9-1977 in the Eden Hospital at 11.00 hours in active labour at 36 weeks of gestation. Her 2 previous pregnancies were normal and delivered normally 2 boys at term. She was a unbooked case with moderate degree of anaemia and severe pre-eclampsia. The height of the fundus was term sized. There were signs of mild degree of hydramnios. There was no history of twins in the family. The foetus presented by face at left mento transverse position. Foetal heart sounds were regular.

The labour progressed normally with rotation of mentum at anterior position. Prophylactic forceps were applied at 16.00 hours under local infiltration of Xylocaine 1% and bilateral pudendal block anaesthesia. The baby was delivered upto umbilicus easily when further progress was arrested. Strong supra-pubic pressure with traction failed to make any further progress.

Vaginal examination and gentle palpation along the foetal thighs and buttocks with great difficulty revealed a thick stalk like structure arising from the buttock upwards the end of which was beyond the reach of the examining fingers. Possibility of a conjoined twins was thought of. Decision was taken to perform embryotomy on the first baby as the foetus appeared dead by that time. Embryotomy was carried out but no connection was detected between the pelvis of the foetus and the thick stalk. At this stage the patient showed signs of exhaustion and shock. Resuscitative measures were taken and further vaginal manipulations were stopped. But the baby was slowly transected at the level of umbilicus.

The patient was taken to the Operation Theatre. Under general anaesthesia L.S.C.S. was performed, when the hind portion of the transected foetus with huge bilobed gluteal tumour was taken out. Rest of the operation was completed without difficulty. There was no difficulty in removal of the placenta. The uterus

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**Registrar, Eden Hospital, Medical College, Calcutta.*

***Associate Professor of Obstetrics & Gynaecology, Medical College, Calcutta.*

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was well contracted without any evidence of injury. The patient received one bottle of blood (group 'O' Rh. positive).

The two transected portions of the foetus were stitched up. It was a female foetus. The bilobed gluteal tumour had displaced the anus anteriorly. The tumour measured 25 x 14 x 15 cms. It was partly cystic and partly solid. The overlying skin was devoid of any hair. The weight of foetus as a whole was 4.5 kg. (Fig. 1).

The X-ray of the stillborn foetus showed evidence of various types of skeletal shadows in the soft tissue mass around the gluteal region (Fig. 2). Histology revealed structures arising from all the three embryonic layers without much differentiation. Diagnosis was sacro-coccygeal teratoma.

During the post-operative period, the patient suffered from stitch abscess, pyometra and urinary tract infection which improved with conservative treatment. Postprandial blood sugar estimation done before the discharge from the hospital showed 92 mg%. She was discharged in good condition on 25-9-77. She did not turn up for follow up.

Discussion

Sacro-coccygeal teratoma is so rare, that most of the physicians may not come across a case during their career. This type of tumour has been found in widely varying ages. About 90 per cent of the reported cases are noted at birth (Salaymeh, 1971). The earliest occurrence of such teratoma was reported in a 3 months old foetus (Gross *et al*, 1951). It is significant that a large majority of the cases were noted in females with an incidence of 75 to 90 per cent (Salaymeh, 1971). Gross *et al* (1951) reported the incidence in female as 80 per cent. There is no adequate explanation for the fact. A variable incidence of twins in the families of those having sacro-coccygeal teratoma has been reported. Gross *et al* (1971) found an incidence of over 50 per cent of twining.

The size of the tumour varies from few centimeter in diameter to a very large one. However, the average size of the tumour is rather small and those weighing over 20 per cent of the total body weight of the infant are extremely rare (Salaymeh, 1971). The gross appearance of this tumour varied widely, may be completely solid, largely cystic or any combination of the two. They are covered by skin which is in most of the cases are devoid of hair (Gross *et al*, 1951; Sladowsky *et al*, 1976).

Cut surfaces show great variation in structure, some are largely cystic, some are entirely solid, others may be combination of the two. Most of the tumours are benign on histological examination. However, malignancy is reported in 15 to 40 per cent in different series (Salaymeh, 1971).

Reported literature did not show any correlation between maternal age and parity with this type of teratoma.

The first stage of labour is normal in most of the reported cases. Majority had spontaneous vaginal delivery, when the tumours were small (Salaymeh, 1971; Gross *et al* 1951). Obstetrical complications mainly dystocia occurred in 13 of 111 cases reviewed by Waldhausen, *et al* 1963. Caesarean sections were frequently required. Dystocia was encountered after delivery of the foetus upto the umbilicus in 2 of the 3 cases reported by Saladowsky *et al* 1976.

The still birth rate was reported to be high i.e. 33 per cent and 90 per cent of the remainder die shortly after birth (Ewing, 1940). Obstruction to urinary tract or rectum occurs in about 15 per cent untreated infants with such tumour. Infection, ulceration, etc. occur in about 10 per cent of the infants (Salaymeh, 1971).

Conclusion

Sacro-coccygeal teratoma is a very rare condition commonly obvious at birth. Some of the large tumours may cause dystocia. Delivery and suprapubic pressure and traction give a chance for survival of the foetus than embryotomy, although caesarean section is ideal. The overall cure rate after surgery is excellent provided the tumour is benign in character, moderate in size and in operable stage.

Summary

A case of sacro-coccygeal teratoma is presented which caused dystocia after delivery of the foetus upto umbilicus. Strong supra-pubic pressure with traction and embryotomy failed to deliver the baby vaginally when L.S.C.S. was performed to complete the delivery.

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References

1. Dillard, D., Mayer, J. and Mc. Alister, W. J. Pediatr. Surg. 5: 53, 1970.
2. Ewing, J.: Quoted by Waldhausen, Killman, Vellios and Battersy, J. S. Pediatr. Surg. 54: 933, 1963.
3. Gross, R. E., Clatworthy, H. W. and Meeker, L. A.: Surg. Gynec. & Obstet. 92: 341, 1951.
4. Levy, J. L. and Linder, L. H.: Am. J. Surg. 116: 822, 1968.
5. Sladowski, C. F., Caterine, A., Gregori, M. D. and Breen, J. L.: Int. Surg. 61: 175, 1976.
6. Waldhausen, J. A., Kilman, J. W., Vellios, F. and Battersby, J. S.: Pediat. Surg. 54: 933, 1963.

See Fig. on Art Paper X