ROBERT PELVIS

(A Case Report)

by

BHAGYAMMA PURUSHOTTAM,* M.D., F.R.F.P.S. (Glasgow)

and

H. T. MANORAMA RAO,** M.D., D.G.O.

The 'Robert' pelvis which bears his name was first described by Dr. Heinrich Ludwig Ferdinand Robert in 1842.

The Robert pelvis is a very rare abnormality, there are a few cases on record in the literature up to date. Only 10 cases of true Robert pelvis have been proved by autopsy or by radiography of patients. So it was thought proper to add one more case to the literature by reporting the following one.

Case Report

Patient by name K.D., a Hindu female, a primigravida, aged 20 years (I.P. No. 6961)

R. No. 1895

was admitted to Lady Goschen Hospital on 20th October 1963, with a history of amenorrhoea of 8 months, the bag of membranes having ruptured 16½ hours earlier.

On admission her general condition was good. Abdominal examination showed the foetus in the left occipito-transverse position with the head above the pelvic brim and overlapping the symphysis pubis. Foetal heart sounds were good.

On pelvic examination the pelvis was found to be grossly contracted transversely, bag of membranes absent and caput succedaneum present.

A diagnosis of a severe degree of transversely contracted pelvis with major degree of cephalopelvic disproportion was made. The patient was delivered of a live female baby weighing 3 pounds 12 ounces by a lower segment caesarean section.

The postoperative convalescence was satisfactory, and mother and child were discharged in a good condition 15 days after delivery.

Investigations

Radiograph of the pelvis, antero-posterior view (Fig. 1).

Photograph of the patient showing the back view (Fig. 2).

X-ray pelvimetry is shown in the Table below.

Comment

In true Robert pelvis there is a maldevelopment of the sacrum with absence of both alae, and hence both innominate bones are found synostosed directly with the rudimentary sacrum. In the original pelvis described by Robert "the anterior surface of sacrum was convex in both directions. Owing to the im-

* *Professor of Obstetrics & Gynaecology and Hony. Obstetrician & Gynaecologist, Government Lady Goschen Hospital, Mangalore (S. India).*

** *Reader in Obstetrics & Gynaecology and Hony. Asst. Medical Officer, Kasturba Medical College, Mangalore and Government Lady Goschen Hospital, Mangalore.*

Received for publication on 20-4-64.

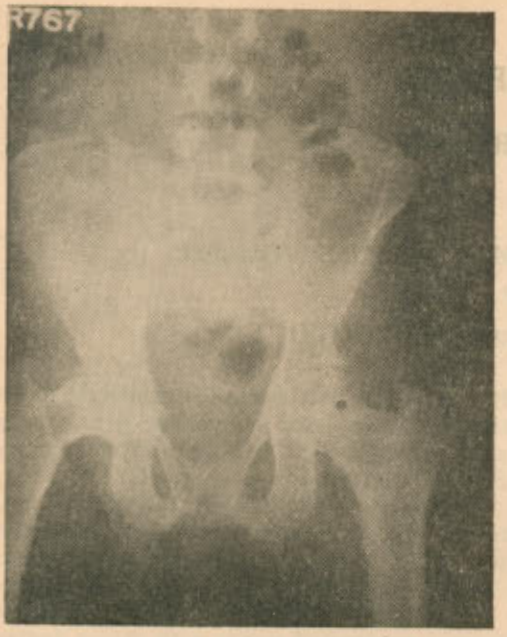

Fig. 1
Antero-posterior view of the pelvis.

perfect development of the sacrum, the pelvis was markedly contracted transversely, and only slightly antero-posteriorly. The pelvis was symmetrical and the ileopectineal lines more or less straight. The inlet was rectangular in shape, being slightly narrow in front". The radiograph of patient K.D. shows the typical characteristics of Robert pelvis. The ileum has firmly synostosed with the sides of the sacrum with no sign of joint space. The inlet of the pelvis is rectangular becoming narrow in front and is slightly oblique. (There is slight scoliosis in the lumbar region with convexity to the right). Pubic arch is narrow and also the transverse diameter is reduced.

According to Berry Hart, Robert pelvis is divided into true and pseudo-Robert pelvis; in the latter there are

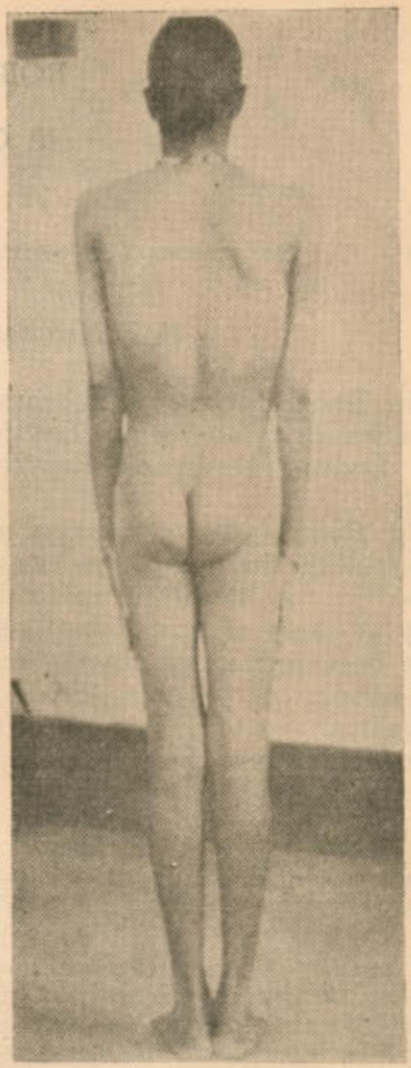

Fig. 2
Back view of the patient.

signs of infection or trauma of the bone. Little has classified the true Robert pelvis into complete and incomplete varieties depending on absence or presence of some form of joint space between the rudimentary sacrum and the innominate bone.

In our case there is no evidence of

joint space and so it is a case of complete variety of true Robert pelvis, as there is no previous history of trauma or infection of the pelvic bones.

In the appearance of the patient with Robert pelvis, the chief characteristic is the narrowness of hips. The narrowness of the hip in our case as shown in Fig. 2 is suggestive of Robert pelvis.

Family history: The mother and sister of the patient had normal deliveries.

The measurements of K. D. compared with those of Dr. Little's case are shown in Table No. 1.

Summary

A case of true Robert pelvis, complete type, who was safely delivered of a living infant weighing 3 pounds 12 ounces by lower segment caesarean section is reported.

Acknowledgements

We thank Dr. S. Sreenivasan, Superintendent of the Hospital, for permitting us to report this case. We also thank Dr. S. C. Saxena, M.S., Reader in Obstetrics & Gynaecology, for giving us valuable help in preparing this paper. We thank the Radiologist Dr. A. R. Ghanekar and the Photographer Sri P. K. S. Madyastha for having taken the radiograph and the photograph. We thank the typist clerk Kum. Sulochana Rao for having

TABLE I
Comparison with Dr. Little's Case

	K.D.	D.R.
Height of the patient	59 in.	59¼ in.
Other Measurements		
Circumference at widest part of the buttocks	27 in.	29.2 in.
Circumference at bust level	30 in.	35 in.
Biscromial diameter	13 in. (32.5 cms.)	34 cms.
Pelvis		
Interspinous diameter	16.5 cms.	16.5 cms.
Intercristal diameter	18.5 cms.	18.5 cms.
Ext. conjugate	16.8 cms.	18.5 cms.
Intertrochanteric	22.5 cms.	23.5 cms.
Post. interspinous	5.5 cms.	3.75 cms.
Intertuberous ischial	3.75 cms.	4.5 cms.
X-ray Pelvimetry		
Antero-posterior inlet	9.6 cms.	9.9 cms.
Greatest transverse diameter of inlet	7.4 cms.	6.55 cms.
Transverse diameter of outlet	4.5 cms.	4.0 cms.
Antero-posterior outlet	13 cms.	11.7 cms.
Interischial spinous diameter	4.8 cms.	

Dr. Little in his article has discussed extensively the aetiology of Robert pelvis and has referred to the world literature.

helped us to type the manuscript.

References

1. Kaiser, I. H.: Am. J. Obst. & Gynec. 78: 1208, 1959.
2. Little, E. W. and Inglis, E.: J. Obst. & Gynec. Brit. Emp. 65: 465, 1958.
3. Stander, H J.: William's Obstetrics, ed. 8, N. Y. & London, 1941, Appleton, Century Co. Inc. p. 912.