NAEGLE'S PELVIS

(A Case Report)

by

S. S. Iyer,* M.D., D.G.O., M.A.M.S.

M. Y. Raval,** M.D., D.G.O., F.I.C.S.

and

U. O. Shah,*** M.D., D.G.O.

Naegle defined the deformity as a pelvis contracted in one of the oblique diameters with complete ankylosis of the sacroiliac synchondrosis on one side, combined with imperfect development of the sacrum and os—innominatum on the same side. Naegle had not observed the deformity in the living body (Thomas—1941).

Though variations in the heights of iliac crests and accompanying scoliosis are suggestive findings, there may be no external deformity, making the diagnosis difficult. All the oblique diameters of the plevis from the inlet to the outlet are diminished on the sound side though, little altered on the affected side, there may be associated congenital malformations of the urinary tract (Masani 1976). Ultimately only a vaginal examination simplifies the diagnosis. Further confirmation can be done with an antero-posterior X-ray of the pelvis.

It is possible to have normal vaginal deliveries (Wahrsinger 1944) while in others, obstructed labour may result in rupture of the uterus (Still and Kao 1959). Naegle wrote that unless the pelvis was of large size and the baby small, caesarean section was the best line of treatment.

*Tutor.

**Professor.

***Registrar.

Department of Obstetrics and Gynaecology, B.Y.L. Nair Charitable Hospital and T.N.M. College, Bombay-400 008.

Accepted for publication on 30-9-80.

CASE REPORT

Mrs. K.V. a 19 years old primigravida presented herself on 30-7-80 for a routine antenatal check-up at the thirty sixth week of her pregnancy. Her last menstrual period was on 19-11-79, the expected due date was 26-8-80.

On examination her pulse was 78 per minute; blood pressure 120/70 mm. of Hg. There was no oedema of the feet. She weighed 112 lbs. and she was 61" tall. On abdominal examination fundal height was 14.2" and abdominal girth 39.1". The foetal heart rate was one hundred and forty per minute and were regular in rhythm. The foetus was in vertex 1 position with the head floating. The Michaelis rhomboid was marked out on the back by joining the posterior superior and posterior inferior iliac spines, of both the sides. This showed a deformity on the right side of the rhomboid.

On vaginal examination the sacral promontory was easily reached. The pelvic wall on the right side was converging towards the midline. The right ischial spine and ileo-pectineal eminence were prominant. Investigation findings were as follows: Haemoglobin—11.5 gms.%, Blood group—A Rh positive and V.D.R.L.—Negative. An antero posterior X-ray of the pelvis was taken (Fig. 1). Ultrasonogram to determine the bi-parietal diameter on 5-8-80 showed that it was 9.5 cms.

Diagnosis of Naegle's pelvis was made and the patient was alvised to remain hospitalized till the time of delivery. She went into a spontaneous labour on 24-8-80 and a lower segment caesarean section was performed. A female baby weighing 2.8 kgms. was delivered. The X-ray findings were confirmed at the time of surgery. The post-operative period was uneventful. An intravenous pyelogram to rule out urinary tract anomaly was done on 2-9-80. The X-ray showed presence of a double renal—pelvis on the right side. (Fig. 2).

Discussion

Wide variations in its clinical manifestations complicates the diagnosis of this condition. A high index of suspicion in all cases of cephalo-pelvic disproportion aided by detailed clinical and radiological examination can help detection of this rare abnormality. Caesarean section is the treatment of choice in most cases with a full term fetus. Routine intravenous pyelograms in the peurperium must be done in all such cases to detect urinary tract anomalies.

Acknowledgement

We are thankful to the Dean of the B.Y.L. Nair Charitable Hospital and T. N. Medical College and Dr. (Mrs.) C. M. Alwani, Head of the Department of Obstetrics and Gynaecology for allowing us to use the hospital data.

References

1. Masani, K. M.: Text Book of Obst. 3rd Edit. 1976.
2. Still, R. J. and Kao, K. L.: J. Obstet. Gynec. Brit. Emp. 66: 676, 1959.
3. Thomas, H.: Am. J. Obstet. Gynec. 41: 830, 1941.
4. Wahrsinger, P. B.: Am. J. Obstet. Gynec. 47: 427, 1944.

See Figs. on Art Paper III