

DYSTOCIA RESULTING FROM ENLARGEMENT OF KIDNEYS

A Report of Two Cases

by

R. R. TRIVEDI*, M.D., D.G.O.

M. M. DOMADIA**, M.B., B.S.

B. N. PURANDARE***, M.D., F.R.C.S., F.C.P.S., F.R.C.O.G.

Dystocia resulting from malformed foetus is a rare occurrence. During the past two decades, the facilities at hand have been considerably enhanced to assess the pelvis at all levels by accurate pelvimetry and to determine cephalopelvic disproportion. Abnormal uterine action can be diagnosed and managed easily. However, occasionally an obstetrician is plagued because of a malformed foetus. The difficulty is not experienced till the malformed foetus brings the progress of labour to a standstill. The dystocia can result from shoulder dystocia, hydrocephalus, or tumours of the neck, abdomen, etc. This paper presents two cases where an intra-abdominal tumour brought about obstructed labour.

Case 1

A patient aged 28 years, III para, was admitted on 11-7-64 at 10.30 p.m. with obstetric history of 2 F.T.N.Ds. of which one

*Lecturer in Obstetrics & Gynaecology, Medical College, Baroda.

**House-surgeon, B. Y. L. Nair Hospital, Bombay.

***Honorary Obstetrician, N. W. M. Hospital, Bombay 12.

Received for publication on 7-5-65.

was living and one dead. Last delivery was 2 years ago. Patient was transferred from a Municipal Hospital with history of delivery of head and hands at 8.30 p.m. and no progress since then in spite of good regular uterine contractions.

On examination, general condition was fair, temp. 97°F, pulse 110/min., resp. 20/min. B.P. 120/80 mm. of Hg. There was no anaemia, oedema or albumin in urine. Other systems were normal. On abdominal examination, uterus was 3" above the umbilicus, contracting every 5-7 mts., contractions lasting for 35-45 seconds. Patient was bearing down with each pain without progress. Lower segment was stretched up to the umbilicus and foetal heart sounds were absent. On vaginal examination cervix was almost fully dilated with a rim of half cm. anteriorly. Hands and head were outside the vulva and thorax was in the vagina. On further exploration, abdomen of foetus showed distension which suggested the probable diagnosis of some abdominal tumour obstructing labour.

Immediately on examination under anaesthesia evacuation was decided on. Patient was given open ether anaesthesia, and exploration of uterus was done. A single foetus with distended abdomen was found. A small incision with embryotomy scissors of about 2" was made in front of thorax after giving traction to the foetal head. The lungs and heart were removed partially followed by an incision in the diaphragm. Exploration of abdomen was done but except a tense swelling nothing could be defined. The swelling was incised with scissors. Few vesicles of various sizes containing clear fluid were removed. It

reduced the size of the abdomen. Continuous gentle traction resulted in delivery of a male still-birth. It weighed 2.8 kgms. Manual removal of placenta was done.

Dissection of the foetus was done in association with the embryologist. Retroperitoneal, well-encapsulated, bilateral masses of 7" x 4", showing multiple vesicles, were seen. The conclusion was that bilateral polycystic kidneys had obstructed the labour. (Fig. 1 and 2).



Fig. 1



Fig. 2

Case 2

A 2nd para was admitted with history of 8 months' amenorrhoea and pain since 6 A.M. Her obstetric history was 1 F.T.N.D. living, 2 years old. General examination: general condition was good, temp. 97°F, pulse 80/per mit., resp. 20/per mit. B.P. 120/80 mm. of Hg.

Abdominal examination: uterus was 40 weeks' size, the foetal head was engaged. F.H.Ss. were regular at the rate of 140 per minute. Patient was getting regular uterine contractions. At 9.00 A.M. head and hands were delivered, followed by failure of progress, in spite of regular uterine contractions. As there was no progress, in spite of giving traction during pains, intra-abdominal tumour was suspected. During this period foetal heart sounds disappeared, so evisceration was decided on. An incision was made on the front of the thorax with Simpson's perforator and extended through the diaphragm. The hand was introduced and the abdominal cavity was explored. An abdominal mass was revealed, part of which was removed manually. The abdomen collapsed and easy delivery could be brought about. The body was dissected which revealed Wilm's tumour obstructing the labour.

Discussion

In 1725 the first case of cystic kidney was reported to the Royal Society of Paris. Probably it was a simple retention cyst. Osiander's case, in 1821, was the first recorded instance in which congenital cystic kidney of the foetus caused dystocia, although Merriman in 1800 had described a case in which delivery was impeded by cystic kidneys and foetal bladder. Buddin and Demelin, in 1900, collected some 50 cases though probably all cases did not have dystocia.

Dystocia resulting from a foetus can be either due to a large sized

healthy normal foetus in a multipara or congenital anomaly. Congenital anomaly can be either hydrocephalus, tumour of neck, abdomen or sacrum.

Abdominal enlargement may result from foetal ascites, kidney or liver neoplasm, distended or dilated bladder or idiopathic ascites.

An enlarged foetal abdomen is almost impossible to diagnose clinically during antenatal period. X-ray examination might show an appearance resembling "Buddha foetus". It is rarely ever suspected till the delivery of the head and hand is not followed by the rest of the body. In case of non-delivery of hands, shoulder dystocia, contraction ring and short cord are to be excluded. Diagnosis can well be established by doing an examination under anaesthesia and exploration of the uterine cavity.

Once the diagnosis is established the life of foetus need not be considered. The incision is made on the thorax and the approach is through the diaphragm. The incision is made either by embryotomy scissors, Mayo's scissors or Simpson's perforator. Hand is introduced through the incision and the diagnosis is confirmed. If it is a cystic swelling which is

tense to feel and fluctuant, it can be punctured and drained. The abdomen collapses and foetus delivers spontaneously.

If it is a solid swelling which is firm, capsulated and non-fluctuant, evacuation is done with embryotomy scissors or by manual removal. The body collapses and delivery becomes easy.

Summary

A case of bilateral polycystic kidneys and a case of Wilm's tumour forming abdominal lumps causing dystocia, and their subsequent management with embryotomy, are described.

Acknowledgment

We sincerely thank Dr. K. M. Masani, Hon. P.M.O., N. W. H. Hospital, for allowing us to publish the data collected from the Hospital. Also Dr. Bhatnagar for his help in discussion.

References

1. Eastman, N. J.: William's Obstetrics, ed. 12, New York, 1961. Appleton-Century-Crofts, Inc., p. 922.
2. Lynch, F. W.: Surg. Gynec. & Obst. 3: 628, 1906.