

ACUTE HYDRAMNIOS

(A Case Report)

by

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Introduction

Acute hydramnios is a very rare condition occurring once in 12,000 deliveries. Mueller (1948) found four cases of acute hydramnios in 49,793 deliveries. Macafee (1950) has reported two cases in 12,021 deliveries. Queenan and Gadow (1970) have reported six cases during a 20 year period in 86,301 deliveries, Brown and Brown (1960) have stated that the condition is so rare that every case should be reported.

Case Report

Patient K. aged 26 years, para 5, gravida 7, was admitted on 6-11-1972, with amenorrhoea 5 months and marked distention of abdomen since 15 days with severe abdominal discomfort, backache and respiratory distress. There was no history of hyperemesis gravidarum, diabetes or previous twin deliveries.

Her menstrual cycles were regular and last menstrual period was on 18th June, 1972.

On examination, patient was anaemic, pulse 114/min. regular, blood pressure 110/70 mm Hg., no edema feet, weight 49.5 Kg.

Systemic examination did not reveal any positive findings.

On abdominal examination, the fundal

height was upto the xiphisternum, abdomen was tense, no foetal parts could be palpated, foetal heart sounds were not heard, but could be detected with ultrasonic foetus monitor in the left lower quadrant. Fluid thrill positive. Abdominal girth was 38".

Per vaginum the Os was closed. Internal ballotment could not be made out.

A diagnosis of acute hydramnios was made.

Investigations done were haemoglobin 6.5 gm%, urine, albumen and sugar absent, microscopic examination few epithelial cells. Plasma proteins 4.5 gm%. Peripheral blood smear, microcytic hypochromic anaemia with anisocytosis and poikilocytosis, platelets adequate, blood urea 32 mgms%, fasting blood sugar 75 mgm%, postparential sugar 102 mgm%. Stool no ova and cyst. Blood group 'O' Rh + ive. X'ray Abdomen done on the same day did not reveal the foetal shadow.

Antianaemic treatment was started and first amniocentesis was done on 7-11-1972. 700 c.c. of liquor was drained and X'ray was repeated which again did not reveal any foetal shadow.

Second amniocentesis was done on 13-11-1972 and 1200 c.c. of liquor was drained. Repeat X'ray after this showed twin pregnancy with no obvious deformity of foetus. Amniotic fluid went on filling up rapidly with increasing discomfort and so on 27-11-1972 4,000 c.c. of liquor was taken out and 200 c.c. of 20% hypertonic saline injected.

Due to marked distention and discomfort the onset of labour was not made out by the patient, or her attendants, till on

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29-11-1972 at 9.00 P.M., i.e., 32 hours after amniocentesis and injection of hypertonic saline, the membranes ruptured with the escape of large amount of liquor which could not be measured followed immediately by the delivery of female stillborn twins and expulsion of a succenturate lobe of placenta about 3" in diameter. Manual removal of placenta was done after 30 minutes as placenta had not separated and there was moderate bleeding, after starting I/V drip with syntocinon 20 units in 500 c.c. of 5% glucose and blood. Atonic bleeding continued after removal of the placenta, so bimanual massage of the uterus had to be carried out for about twenty minutes. Total blood loss before and after removal of placenta was estimated to be about 700 c.c. which was replaced with blood. Placenta was uniovular with velamentous attachment of both cords. It was thin and weighed 500 gms along with the succenturate lobe.

Autopsy report of foetii—Both female foetii first weighing 450 gms and second 400 gms. No external anomaly seen. Gastro-intestinal tract, no anomaly seen, caecum subhepatic, intestinal rotation normal. Genitourinary tract-uterus and adnexa normal. Kidneys large lobulated lying between L1-L4 segments (within normal limits). Thorax-lungs solid and sank in water, normal in appearance. Heart normal, Central nervous system—normal.

Discussion

According to Queenan (1970) two thirds of cases of hydramnios are associated with multiple pregnancies, pre-eclamptic toxæmia, diabetes mellitus, erythroblastosis foetalis and congenital malformations of the foetus.

Acute hydramnios is a feature before the 20th week of pregnancy. Macafee (1950) has reported one case at 14 weeks. When no associated condition is present uniovular twins or congenital malformation must be suspected. X'ray is useful in detecting, skeletal defects and twins but in the presence of hydramnios normal X'ray appearance is of not of help. Some

times, after amniocentesis a better idea can be obtained as in this case.

Acute hydramnios calls for immediate treatment as maternal distress is always present. Therefore, abdominal paracentesis should be carried out with removal of as much fluid as can be removed safely. Attempts to continue the pregnancy by repeated amniocentesis are not always successful as fluid reaccumulates rapidly. Queenan (1970) reports the management of two cases of recurrent acute polyhydramnios by multiple amniocentesis. Macafee (1950) stated that the success of repeated paracentesis is doubtful unless one of the babies dies and liquor amni in that sac is absorbed. Postpartum haemorrhage is an associated feature (Beck 1935, Delee and Greenhill 1935, Gibberd 1947, Brews 1949, and Macafee 1950). Incidence of manual removal of placenta is also high.

Foetal mortality is high in acute hydramnios. Poeck (1923) has given mortality as 79% as against overall mortality of 59.6% in all cases of hydramnios.

In this case we were faced with the choice of prolonging the pregnancy by multiple amniocentesis for a few weeks till the haemoglobin improved with parenteral iron so that the patient could withstand the anticipated excessive blood loss in the third stage, or, of relieving discomfort immediately by terminating the pregnancy.

An attempt was made to delay delivery by adopting the first choice but had to be abandoned after 21 days due to patient's discomfort.

It is very likely that the onset of labour was a result of the removal of a large amount of liquor (4,000 cc), than to the introduction of just 200 cc 20% saline, as this amount would get too diluted to be effective.

Summary

A case of acute hydramnios due to twins is presented because of the rarity of the condition, and the problems of management are discussed.

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