Medical Memoranda

Acute Hydramnios, with Twins, Successfully Treated by Abdominal Paracentesis

Rivett (1933), Lloyd (1943), Erskine (1944), Danziger (1948), Hammond (1952), and Brown (1958) have reported cases in which amniotomy by abdominal paracentesis has allowed a plural pregnancy, complicated by acute hydramnios in the middle trimester, to continue until the delivery of a normal living child.

In the following case *two* normal living children were secured. We have searched the literature and have not found a single report of a similar case.

CASE REPORT

The patient, aged 39, presented on August 11, 1960, complaining of abdominal swelling for two weeks. She had been married for seven years and had had no previous pregnancy. What she regarded as her last normal period began on May 16. At the beginning of August she became aware of an abdominal swelling which had increased rapidly in size. Abdominal examination revealed a tense cystic swelling of the size of a normal 36-weeks pregnancy. Vaginal examination confirmed that the swelling was uterine in origin. X-ray examination showed two foetuses of just over 16 weeks' maturity.

On admission to hospital on August 17 the patient was slightly orthopnoeic. The abdominal swelling had increased to the size of a normal full-time pregnancy. Foetal parts could not be palpated and foetal heart sounds could not be heard. The abdominal circumference was 39 in. (99 cm.). She became more orthopnoeic and the abdominal swelling continued to increase rapidly. On August 22 amniotomy was performed by abdominal paracentesis, using a lumbar-puncture needle. After 3 pints (1.7 litres) of liquor amnii had been withdrawn the needle blocked and the operation was discontinued. Within 24 hours a further 6 pints (3.4 litres) of liquor amnii was drained by a second amniotomy, this time using a 2.5-mm.-bore trocar and cannula. The next day the patient felt more comfortable and the uterus was the size of a normal 26-weeks pregnancy. The patient was allowed home on September 3, by which time foetal heart sounds could be heard.

When she was seen at the antenatal clinic on September 12 she had felt movements for one week. On October 3 the uterus was the size of a normal 28-weeks pregnancy, and an x-ray film showed normal twins of just under 24 weeks' maturity. By October 24 the size of the uterus had increased to that of a normal 36-weeks pregnancy. Her blood-pressure had remained normal and the urine clear.

One week later she was readmitted to hospital because of increasing dyspnoea and abdominal discomfort. On November 9 paracentesis was repeated, using the trocar and cannula. Six pints (3.4 litres) of liquor amnii was drained. This reduced the abdominal circumference from 41½ to 37½ in. (105 to 95 cm.). Five days later 5 pints (2.8 litres) of liquor amnii was removed, making a total of 20 pints (11.4 litres).

On November 19 the membranes ruptured and several pints of liquor amnii drained through the vagina. Labour began 18 hours later. The first twin was presenting by the vertex. The second stage was reached in 21½ hours, but its completion was delayed by uterine inertia. Pudendal nerve block was achieved, and after episiotomy the first twin was easily delivered with forceps. The child, a girl, cried soon after birth and weighed 3 lb. 11 oz. (1,670 g.).

Soon after the delivery of the first twin the frank breech of the second entered the pelvis. Very little liquor amnii escaped from the second sac when the membranes over the breech were torn. The delivery was completed by the Burns Marshall method. The second child, another girl, was born seven minutes after the first, cried soon after birth, and weighed 3 lb. (1,360 g.).

The complete uniovular placenta was expelled without difficulty three minutes later and showed no abnormality. Ergometrine was then given and the perineum was repaired. Blood loss was 6 oz. (170 ml.).

The puerperium was uncomplicated. Lactation was suppressed. The patient's haemoglobin was 80% (Sahli) on the third puerperal day and she was allowed home on the eighth day.

The twins were nursed in the paediatric department until almost 5 lb. (2,270 g.) in weight. They continued to make good progress at home.

COMMENT

The estimates of foetal maturity made from two x-ray examinations, the one eight weeks after the other, were in agreement, the maturity on August 11 being estimated at just over 16 weeks and on October 3 at just under 24 weeks. This means that the last true menstrual period probably began on April 18, four weeks before what the patient thought to be her last normal period.

It follows that the first and second amniotomies were performed towards the end of the eighteenth week. The fact that 9 pints (6.1 litres) of liquor amnii was removed within 24 hours at this time is evidence of the severity of the hydramnios. Amniotomy was repeated at 29 weeks and near the end of the thirtieth week, and the patient was delivered about the end of the thirty-first week.

We thank Professor David Fyfe Anderson for permission to report this case.

GEORGE R. BROWN, M.B., Ch.B., M.R.C.O.G.,
Late Registrar in Obstetrics and Gynaecology,
Glasgow Royal Maternity Hospital and
Glasgow Royal Infirmary.

SARAH MACASKILL, M.B., Ch.B., M.R.C.O.G.,
Lecturer in Obstetrics and Gynaecology,
University of Glasgow.

REFERENCES

- Brown, G. R. (1958). *J. Obstet. Gynaec. Brit. Emp.*, **65**, 61.
Danziger, R. W. (1948). *Brit. med. J.*, **2**, 205.
Erskine, J. P. (1944). *J. Obstet. Gynaec. Brit. Emp.*, **51**, 549.
Hammond, D. O. (1952). *West J. Surg.*, **60**, 584.
Lloyd, O. (1943). *Middlx Hosp. J.*, **43**, 5.
Rivett, L. C. (1933). *J. Obstet. Gynaec. Brit. Emp.*, **40**, 522.

The objects of the Mobile Physiotherapy Service Association, the president of which is Sir Cecil Wakeley, are to promote the establishment of mobile physiotherapy services where they are needed, and to advise and co-ordinate services already established. These services take massage, electrical, and exercise therapy to the homes of those who are (a) physically incapable of attending a hospital department where treatment is free under the National Health Act, and (b) unable to afford the full cost of home treatment. Chartered physiotherapists drive their own vans equipped with portable apparatus for use in the patients' homes. This service is dependent upon voluntary help. The secretary's address is Mrs. J. HINE, Walled Cottage, Kinnersley, Sidlow, near Reigate, Surrey.