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# RESULTS OF EXTERNAL PROPHYLACTIC

VERSION

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This is a preliminary communication with the object of setting out results of prophylactic cephalic version conducted under the direction of Prof. Archangelsky in cases of breech and transverse presentations. It relates to the period 1931-41, with the majority of cases dealt with in the years 1940-1.

External version was carried out in 324 cases of breech, transverse, and oblique presentations. Of these 324 cases version was successfully performed in 293 (90.5%) and unsuccessfully in 31 (9.5%). Of the 293 successful cases 251 had been breech and 42 transverse and oblique. In somewhat under 10% of the cases either version could not be performed or, when performed, the position of the foetus relapsed into the original state. As a rule the operation was conducted in the 35th to 36th week of pregnancy, and only in 4 instances was an anaesthetic employed. In the majority of cases of successful version the desired result was obtained at the first attempt. Repeated attempts had to be made in a few isolated cases—multiparae with a small foetus and lax pendulous abdomen.

To what extent is foetal mortality reduced by the timely performance of version? Of 247 births that took place after version 3 were stillbirths (1.2%). On the other hand, among 19 cases in which version was not successful there were 2 stillbirths (10.5%). Of 228 cases in which the performance of version procured a vertex presentation there was only one stillbirth (0.44%).

Table to Illustrate the Foregoing

	No. of Births	Live Births	Stillborn		
Version performed . , , successful . , , unsuccessful .	. 247 . 228 . 19	244 (98·8°/) 227 (99·6°/) 17 (89·5°/)	3 (1·2 %) 1 (0·44%) 2 (10·5 %)		

#### What is the Significance of External Prophylactic Version in **Obstetrics?**

To answer this we must examine the incidence of the various abnormal positions of the foetus. Of 107,966 births in the city of Moscow 99,552 took place at term. Of these 99,552 full-term births 96,048 (96.2%) were vertex presentations, 3,148 were breech (3.2%), and 356 cases were transverse and oblique (0.4%). Thus all non-vertex presentations provided 3.6%. Of the 96,048 head-presentation births 905 (0.94%), of the 3,148 breech presentations 318 (10.1%), and of the 356 transverse presentations 104 (29.2%) were stillborn.

	Births	Stillborn
Total number of births	107,966	2,048 (1.88%)
Full-term births	99,552	1,327 (1.32%)
Head presentation	96,048	905 (0.94%)
Breech ,,	3.148	318 (10.1%)
Transverse and oblique	356	104 (29.2%)
After version	247	3 (1.2%)
After successful version	228	1 (0.44%)

It will thus be seen that successful version reduces the mortality to the level obtained in ordinary head presentation and so reduces the foetal mortality in breech presentation 10 times and in transverse or oblique presentations 25 times.

#### Complications Attendant on Version

1. Premature Labour.--Out of 103,735 births in Moscow 7,687 (7.4%) were premature. Out of 228 cases in which version procured a head presentation at birth 2 were premature, or below 1%. This low rate is explained partly by the fact that version was done in the 36th week, a time close to full term already, and partly by the fact that version was not

performed when there were any contraindications. Obviously premature labour, where it took place, occurred before the date at which version would normally have been undertaken. All the same, the fact that only 1% of premature labour took place after version in 228 cases permits of the conclusion that version per se does not lead to premature labour.

- 2. Haemorrhage.—Out of 324 cases in which version was carried out only 1 case had slight haemorrhage—about 3 weeks before the onset of labour-and this had no effect on the subsequent period of pregnancy or labour.
- 3. Premature Separation of the Placenta; Adherent Placenta Requiring Manual Separation.—These conditions did not occur in any of our cases. This leads to the conclusion that external version, when all contraindications are carefully observed, does not lead to risks of haemorrhage.
- 4. Premature Loss of Liquor Amnii.—Out of all our cases this took place in about 5%. In the cases in which version was carried out premature rupture of the membranes occurred in  $2\frac{\%}{6}$ . This leads to the conclusion that the treatment exerts no influence in this direction.
- 5. Prolapse of the Cord.—Among all our clinical material this was observed in 0.4% of cases of head presentation and 2.1% of cases of breech presentation. After version which secured a head presentation this took place in 0.44%. The conclusion is reached that prolapse of the cord is not accelerated by version. On the other hand, in those cases in which a breech presentation could not be successfully turned into a head presentation prolapse of the cord took place in 11.5%.
- 6. Does Version produce a More Frequent Occurrence of a Twisted Cord?—Among all our clinical cases this was observed in 16.8%. Out of 228 cases in which version procured a head presentation at birth this was noted in 12 cases. or 5.2%.

We see, therefore, that external cephalic version does not contain any dangers provided it is carried out with due regard to indications, contraindications, and proper technique.

## Medical Memoranda

### Histiocytic Medullary Reticulosis with Transient Skin Lesions

In 1939 Bodley Scott and Robb-Smith separated from the group of diseases commonly known as "atypical Hodgkin's disease" a number of cases with such a uniform clinical and pathological picture as to suggest that they represented a distinct disease process. Histologically they showed a cellular proliferation, involving chiefly the histocytes and their precursors, which affected the whole lympho-reticular tissue, the medullary portions of the organs being principally affected; and for these reasons "histocytic medullary reticulosis" was suggested as a pathologically descriptive name for the disease. They reported four new cases and gave records of six others which had previously been published. The clinical picture was that of a rapidly fatal disease characterized by fever, wasting, generalized enlargement of the lymph nodes, enlargement of the liver and spleen, progressive anaemia, leucopenia, and, in some cases, purpura and jaundice. The following case, which histologically proved to be typical of this disease, showed many of these clinical features but differed in presenting a leucocytosis, which has not been previously recorded, and skin infiltrations, which had disappeared by the time the patient died.

#### CASE RECORD

Case Record

A married woman aged 52 was seen in consultation with Dr. H. S. K. Lowry on Nov. 3, 1942, complaining of weakness. She had enjoyed good health apart from a rash two years previously which was thought to be pemphigus. For three and a half weeks she had been easily tired. Two weeks later she had diarrhoea and a temperature of 101°. Four days after this she developed a cough with rusty sputum. On sulphapyridine the temperature fell to normal and then gradually rose again. Two days before the consultation a tender purplish lump had appeared on the face, and this was followed by similar lesions on the trunk and limbs.

On examination her temperature was 98.6° and pulse 102. She looked ill. Her face had a yellow tinge, but there was no jaundice. The mucous membranes were pale. The skin lesions were situated on the forehead, cheeks, neck, upper chest, back, and proximal halves of arms and legs. They were raised purplish-red plaques

varying in diameter from 1/4 to 1 in., firm in consistency, and tender. The colour faded on pressure but did not completely disappear. There were enlarged soft lymph nodes in the left posterior triangle and right axilla. There was an area of impaired resonance with diminished air entry and rales in the left axilla. The liver was enlarged to 1/2 in. below the costal margin, and the tip of the spleen was just palpable. A blood count gave: erythrocytes, 3,910,000; haemoglobin, 62%; colour index, 0.8%; leucocytes, 13,400 (polymorphonuclears 10,251, lymphocytes 2,680, eosinophils nil, basophils nil, large mononuclears 469). The Paul-Bunnell test was negative, as was blood culture. The urine was normal.

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as was blood culture. The urine was normal.

The patient ran an irregular pyrexia up to 103°. Fresh skin lesions appeared during the next two days and then gradually faded and disappeared. None were visible at the time of her death. Enlarged nodes were palpable in both posterior triangles, axillae, and groins. The spleen became more easily palpable. The leucocyte count rose to 17,800 and then fell to 7,600 shortly before death. In spite of blood transfusion haemoglobin fell to 43%; she developed ascites and oedema, and died on Nov. 30, 7½ weeks after the onset of symptoms. At no time during the illness were there petechiae or haemorrhages from mucous membranes.

\*Post-mortem Examination\* (Dr. T. B. H. Haslett).—There was generalized enlargement of lymph nodes, more particularly those of the aortic, coeliac, and mesenteric groups. They were white and fleshy, with considerable haemorrhage into the mesenteric nodes. The spleen was enlarged, soft, and red, the increase appearing to be chiefly in the pulp, although there were a few discrete white nodules on the cut surface. The liver was fatty but otherwise normal. The lungs showed passive congestion and terminal bronchitis. The other organs were normal.

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Histological Report (Dr. A. H. T. Robb-Smith).—Section of a lymph node showed a marked proliferation in the sinus and medulla of the histiocytic elements and of atypical cells—pro-histiocytes; i.e., large cells which are polygonal in outline with nuclei rich in chromatin and prominent nucleoli. There were also zones of fibrinoid necrosis, but no obvious increase of fibrous tissue and no free iron could be observed, nor was there any proliferation of the histiocytic elements in the peri-adenoid tissue. The spleen showed a comparable picture, although the degree of necrosis was even more marked, and it had only an occasional follicle which could be made out. There was no free iron in the spleen. Both in the lymph node and in the spleen there had been phagocytosis of the red cells by the histiocytes. The liver was the least involved. There were a few periportal collections of pro-histiocytes, but the Kupffer cells, although hypertrophied, were essentially normal. The appearances throughout all the organs were typical of histiocytic medullary reticulosis. reticulosis

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#### REFERENCE

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#### Pyloric Stenosis in Identical Twins

It may be generally stated that identical abnormalities in unzygour twins are no more frequent than in brothers and sisters born singly, whereas in monozygotic twins it is the rule that abnormalities are shared. Assuming that pyloric stenosis is a congenital abnormality, the above statement should be borne out by examination of recorded cases. This appears to be so (see Table). dizygotic twins are no more frequent than in brothers and

Summary of Cases of Pyloric Stenosis in Twins (O'Donnell and Klein, 1941)

	Both Affected	One Affected
Dizygotic twins (binovular) Monozygotic twins (uniovular)	 2 10	21 1 + 1 ?*

<sup>\*</sup> The two cases of monozygotic twins in which only one member was affected were reported by Lasch (1925) and Sheldon (1938). In both of these the type of twinning was substantiated by a description of the placentae, only one chorion being present in each case. In the former the diagnosis seems to have been somewhat in doubt, but in the latter a pyloric tumour was found at operation on the affected member. Observation of one feed only in the other twin revealed no evidence of pyloric stenosis.

#### CASE REPORT

CASE REPORT

Male twins A. C. and B. C. were born on Feb. 24, 1943. They have a normal brother aged 3. The delivery was normal, and the placenta was described as a single body with only one chorion. Both were entirely breast-fed. At four weeks A. C. started vomiting after nearly every feed, and the vomits were often projectile in character. The stools were green. He was admitted to the Hospital for Sick Children, Great Ormond Street, one week later weighing 6 lb., or 1 lb. 4 oz. below the estimated weight for age. (His brother at this time weighed 6 lb. 8 oz.) Test feeds showed that the was taking 2½ to 3 oz. per feed, given three-hourly—six in the day. On examination the ears, throat, and urine were normal. Dehydration was not evident. Observation of the abdomen during a feed showed typical "golf-ball" peristalsis, and a pyloric tumour was palpable in the right upper quadrant. Rammstedt's operation was performed by Mr. Humby under local anaesthesia and a definite tumour was found. Convalescence was uneventful, and the baby

was discharged home, gaining weight, on the fourth day after opera-

was discharged nome, gaining weight, on the fourth day after operation, returning on the eighth day for removal of stitches.

B. C. has a right inguinal hernia. He is described by his mother as "never having vomited since birth." Feeds have been watched on three occasions; visible peristalsis has been seen and a pyloric tumour felt. A barium meal was given at three months, and "a definite delay at the pylorus" was reported.

#### COMMENT

This report presents two interesting features: (1) monozygotic twins with the same congenital abnormality; (2) pyloric stenosis present in a baby without producing any symptoms.

I should like to express my indebtedness to Dr. Donald Paterson for permission to publish this memorandum.

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#### Induction of Labour in Contracted Pelvis by Digital Separation of the Membranes

Although most obstetricians in this country are now agreed that the method of treatment of choice for cases of minor and medium degrees of contraction of the pelvic inlet in primi-gravidae is by "trial labour" and not by surgical induction before term, all must have been disappointed at the necessity for Caesarean section in those cases in which the "trial" failed because of the "more than average" size of the baby. Caesarean section, especially in the young primigravida, is a procedure which, if delivery per vaginam is impossible, is better avoided, as it limits the number of pregnancies to three, and, in fact, the patient often expresses a desire to be sterilized at the second operation.

The problem in these cases is to get the patient to go into labour while the baby is still small enough to pass through the pelvic brim. Simple medical induction by castor oil, quinine, and pituitary extract is only rarely successful before term, whereas surgical induction by rupturing the fore-waters or even the hind-waters contraindicates Caesarean section, should the latter become necessary later on for such indications as uterine inertia or foetal distress, by reason of the risk of sepsis.

The purpose of this communication is to recommend digital separation of the membranes from the lower uterine segment, and this is performed immediately before simple medical induction is begun. Separation of the membranes has been advocated by various authorities, but, so far as I know, is not generally practised. It is carried out, I believe, in the Simpson Memorial

Hospital, in Edinburgh.

In cases of pelvic contraction in which bimanual examination is being carried out at weekly intervals after the thirty-sixth week, and when it is decided that the head will just mould through the brim, digital separation of the membranes by using the index finger of the right hand is performed with the usual antiseptic precautions. The membranes are cleared for as great an area as the finger can reach when introduced through the os. Medical induction is started the same day.

During the past 18 months this method has been used in this department in suitable cases of contraction of the pelvic brim, mainly where the true conjugate diameter was between 3.25 and 3.75 in. In a series of 32 such cases in which separation of the membranes, followed by medical induction, was carried out labour failed to come on within a period of 10 days in only three. The mean weight of the babies in the cases which responded was 6 lb., labour was not long, and use of outlet forceps was necessary in only two. It may be said, therefore, that labour was induced too soon, but the striking fact is that labour can be brought on by this method in the great majority of cases after the thirty-sixth week. There was one neonatal death, occurring in the first fourteen days.

The advantages of this method are: (1) Caesarean section

can be safely undertaken later in labour if necessary (it was necessary in the three cases which did not respond); (2) the membranes, being intact, serve to protect the soft head as it moulds through the brim; (3) such complications as prolapse of the cord are obviated; (4) if medical induction is begun on the same day, and is repeated every third day, labour comes on within a day or two in the great majority of cases.

I have pleasure in expressing my indebtedness to Dr. W. J. Clancy for his advice and assistance, and to Dr. Rennie, medical officer of health, and Dr. James Clark, medical superintendent, for permission to publish this communication.

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