The whistle is held in the teeth and closed lips, so that it cannot be applied in cases of unconscious asphyxia. No time-consuming gadgets can yet be authorized where every second is vital. The device is intended to train operators to do their life-saving task efficiently.

At a recent demonstration in London before 130 doctors of the St. John Ambulance Brigade nearly all signified, by a show of hands, their wish to try the method. The tidal-air whistle and nose-clip can now be obtained from Messrs. Siebe Gorman and Sons, Tolworth, Surrey, for a few shillings.

Medical Memoranda

A Case of Twins

The publicity which nowadays is focused on the higher categories of multiple births has caused mere twins almost to escape attention. The following case, however, is interesting enough to be placed on record.

CASE REPORT

The patient was a multigravida aged 26, height 5 ft. 3 in. (1.6 metres), weight 8 st. 5 lb. (53 kg.). Her last menstrual period began on May 1, 1947, and her expected date of delivery was on February 8, 1948. She had one child, a normal full-time delivery on November 10, 1942, weighing 8 lb. 15 oz. (4.05 kg.). There was a history of twins in the family.

In the early months of pregnancy she had some nausea and sickness, which soon improved. At 19 weeks the fundus was two fingerbreadths above the umbilicus. At 23 weeks it reached to midway between the umbilicus and xiphisternum. At 30 weeks the uterus measured 37 in. (0.94 metre) in circumference and 14 in. (35 cm.) in convexity. One small head was felt in the pelvis. X-ray examination on November 21 showed twin pregnancy, the first a vertex and the second a breech.

The patient continued to feel well for the rest of the pregnancy, apart from increasing heaviness. Her weight rose from 8 st. 5 lb. to 11 st. 10 lb. (53 to 74.4 kg.). Her highest blood pressure was 136/80, and at no time was there any albuminuria or oedema. She was given iron and calcium during pregnancy, and was admitted for rest one week before term.

On admission both foetuses presented by the vertex. The foetal heart rates were 136 and 142. Measurements of the uterus were: circumference 46 in. (1.16 metres) and convexity 23 in. (58 cm.).

A medical induction was contemplated at term, but at 10.30 p.m. on February 8, 1948, she went into labour. At 5.30 a.m. the next day the os was fully dilated, and at 7.30 a.m. she was delivered spontaneously of a living male infant, weighing 10 lb. 0½ oz. (4.54 kg.) in the R.O.A. position. After 20 minutes pains restarted, and 15 minutes later a second living male infant, weighing 8 lb. 3 oz. (3.71 kg.) was born in the L.O.A. position. Twenty-five minutes later the placenta and membranes were expelled intact, the total length of labour being 10 hours 25 minutes. There was a loss of 18 oz. (510 ml.). The placenta was binovular in type and weighed 3 lb. 15½ oz. (1.8 kg.)—i.e., little less than one-quarter of the combined weights of the infants.

The puerperium was entirely uneventful. Both infants had regained their birth weight by the seventh day, and by the tenth day the larger one took 18 oz. of milk from the breast, and the smaller one 14½ oz. (420 ml.). Neither took less than this in 24 hours during their subsequent days in hospital. Residual milk expressed was 3½ oz. (106 ml.), making a total yield of 36 oz. (1.02 litres) of breast milk on the tenth day.

The babies were fed simultaneously at all feeds, and were discharged on the 19th day, fully breast-fed, and weighing 10 lb. 1½ oz. and 8 lb. 9 oz. (4.58 and 3.88 kg.) respectively.

The mother had the antenatal preparation of the breasts which is practised at this hospital (Waller, 1946), and during her lying-in needed no more help than the usual care and patience of the nursing staff.

Throughout her pregnancy she was well, and she carried the babies to term, a comparatively uncommon event in twin pregnancies. The records of this hospital show only 14 instances out of 67 twin deliveries in the past four years.

Hospital	Year	No.	Average Weight				Heaviest Weight							
			Twin 1		Twin 2		Twin 1		Twin 2					
			lb.	oz.	kg.	lb.	oz.	kg.	lb.	oz.	kg.			
Queen Charlotte's ..	1945	19	5	6	2.44	5	9	2.52	7	9	3.43	8	8	3.85
Guy's ..	1946	17	5	1	2.29	6	1	2.75	8	2	3.68	6	12	3.06
Liverpool ..	1944	28	5	2	2.32	5	7	2.47	7	0	3.18	7	6	3.35
Cambridge ..	1945	6	6	3	2.81	5	11	2.58	6	15	3.15	7	7	3.37
B.H.M.B., Woolwich	1944	17	5	0	2.27	5	3	2.35	6	6	2.89	7	3	3.26
" "	1945	20	4	10	2.10	5	3	2.35	6	4½	2.84	7	4	3.32
" "	1946	11	6	0	2.72	5	12	2.61	7	11	3.49	6	8	2.95
" "	1947	19	5	3	2.35	4	5	1.96	7	4	3.29	7	7	3.37

As will be seen from the accompanying table, the average weights of twins, taken from several different hospital reports, range between 5 lb. and 6 lb. 3 oz. (2.27 and 2.81 kg.). The heaviest weights recorded in the series were 7 lb. 9 oz. and 8 lb. 8 oz. (3.43 and 3.85 kg.) at Queen Charlotte's Hospital in 1945.

Progress has been consistently good. Breast-feeding was maintained, apparently without strain, for eight months. At 3 months the babies weighed 13 lb. 8 oz. and 11 lb. 9½ oz. (6.12 and 5.26 kg.). They had had no illnesses and were free from any sign of rickets. The haemoglobin level was found to be 60% in both cases, and iron was prescribed. When last seen on October 7 (aged 8 months) they weighed 22 lb. and 20 lb. 8 oz. (9.98 and 9.3 kg.) respectively and were very healthy.

My thanks are due to Mr. Keith Vartan, medical director, and Dr. Harold Waller, honorary paediatrician, for permission to publish this case and for their help and advice.

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Congenital Pyloric Stenosis in Three Successive Male Babies of the Same Parents

The following cases are reported in the belief that it is rare, if not unique, for the same parents to have three consecutive male babies suffering from congenital pyloric stenosis. It would be interesting to know if any readers have had similar experiences.

CASE REPORTS

Case 1.—This occurred in July, 1945. The precise clinical details are lacking except that the condition was diagnosed clinically and confirmed at operation. The child died shortly after the operation. It is believed that the general condition had greatly deteriorated before consent was given by the parents.

Case 2.—This occurred in July, 1947. The clinical features were classical in that projectile vomiting started at the end of the second week after birth. Visible peristalsis and a palpable mass were evident. Unfortunately, however, the family conditions left something to be desired, and the parents did not use the "eumydrin" with which the doctor was treating the case. Other therapeutic measures were carried out by the parents against the doctor's advice and operation was refused. Inevitably the general condition became worse, and when eventually the parents realized the folly of their ways the child died before operation could be performed. A post-mortem

examination was, however, carried out and a greatly hypertrophied pylorus was found with complete stenosis.

Case 3.—This occurred in July, 1948. The child was a male and the projectile vomiting started towards the end of the second week. Visible peristalsis and a palpable mass were again found after feeding. Treatment with 1/750 gr. (0.875 mg.) of eumydrin before feeds was begun, and from the outset the condition was good. On this occasion co-operation from the parents was forthcoming and it was possible to carry out a Rammstedt operation in the early stages. Recovery was rapid and uneventful.

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Congenital Pyloric Stenosis in Binovular Twins

The aetiology of congenital pyloric stenosis is quite obscure. The constant pathological findings and the onset a few weeks after birth point to some defect in the development of the pylorus, widely assumed to be dependent on a genetic factor.

Individual reports of the disease in two or more siblings have appeared from time to time (Parker, 1927; Bilderback, 1928; Cockayne, Moncrieff, and Sheldon, 1928; Thompson and Gaisford, 1935; Fabricius and Vogt-Müller, 1937; Donovan, 1938; O'Donnell and Klein, 1941; Cathala and Cler, 1944; Marquezy, 1944; Kaufman, 1947). On the other hand, Akin and Forbes (1947) found only three instances in 147 patients, Nafe (1947) six cases in 129 patients, and Gavois and Poyanne (1944) one case in 67 patients. It is clear that it is unusual for siblings to be affected, although Cockayne and Penrose (1943) concluded, after a most exhaustive investigation, that there was a definite though small familial incidence.

Occasionally pyloric stenosis has occurred in successive generations. The father of the female patient reported by Donovan (1938) had undergone operation for stenosis when a few weeks old; one of Nafe's (1947) patients had an uncle who had had the disease, as had the maternal aunt of the pair of twins reported by de Lange (1936). Schrieber (quoted by Laubscher and Smith, 1947) described a patient whose father and grandfather both suffered from pyloric stenosis in adult life, which was believed to be of congenital origin. Caulfield (1926) cited a further case that was even less convincing. Cockayne (1934) reported two pairs of twins who were first cousins, all of whom had the disease. The absence of any definite hereditary characteristics does not lend support to the genetic theory, but if a Mendelian recessive was concerned it would remain concealed for long periods, showing a tendency to exposure particularly on intermarriage; and in respect of this Cockayne and Penrose (1943) found the proportion of patients with consanguineous parents exceeded random expectation.

Laubscher and Smith (1947), in a recent review on congenital pyloric stenosis in twins, found it recorded in 13 monovular twins; in 11 of these both twins were affected, while Sheldon (1938) and Lasch (1925) each noted an exception. In 24 sets of binovular twins there were two instances in which both were affected. Laubscher and Smith (1947) reported binovular male twins, both of whom underwent operation five weeks after birth, and O'Donnell and Klein (1941) recorded a similar occurrence; Nafe (1947) mentioned that he had recently seen binovular twins operated on for pyloric stenosis on the same day.

CASE REPORTS

The mother, a 2-para aged 33, gave birth to a male child on June 29, 1948; simultaneously the membranes of the twin

were artificially ruptured, but the uterus became inert and the second child, a female, was not born until July 1. There was an elder child, a girl aged 6. No history was elicited of any similar trouble either in the mother's or in her husband's family, and the parents were not related.

First Twin.—Male, born June 29, 1948; birth weight, 6 lb. 2 oz. (2.78 kg.). He was breast-fed for the first fortnight, but then changed to a proprietary food. He thrived until July 21, when he vomited after one of his feeds. Three feeds later he vomited again, and thereafter following every bottle: the vomitus became large in quantity and projectile in nature. On July 23 he was admitted to Queen Mary's Hospital in a dehydrated condition, and weighing 5 lb. 3 oz. (2.35 kg.). A palpable tumour lay under the right costal margin, with visible peristalsis in the epigastrium. On July 24 the abdomen was explored under local analgesia. A firm pyloric muscle tumour was found, and a typical Rammstedt's operation was performed. The child made an uneventful and rapid recovery.

Second Twin.—Female, born July 1, 1948; birth weight, 4 lb. 2 oz. (1.87 kg.). She was maintained in an oxygen tent for five days, with three-hourly oesophageal feeds of a proprietary food. After a further three weeks in the premature baby nursery she was discharged home, on July 25, weighing 5 lb. 8 oz. (2.49 kg.). For a few days she continued to progress favourably, but on August 1 suddenly vomited after a feed, and thereafter shortly after every bottle; with each vomitus a large quantity was ejected in projectile fashion. On August 3 she was admitted to the Connaught Hospital because of an outbreak of whooping-cough at Queen Mary's Hospital. She weighed 4 lb. 1 oz. (1.84 kg.), but was less dehydrated than her brother had been. Peristaltic waves crossing the epigastrium were easily visible; and a mobile tumour was palpable under the right costal margin. She was given a feed and shortly after it was forcibly vomited. On August 3, under open ether anaesthesia, a Rammstedt's operation was performed for a typical congenital hypertrophied pylorus. Her post-operative progress was quite uneventful and she rapidly gained in weight.

COMMENT

A study of the published data, together with such cases as the one reported here, reveals the following: (1) the disease may occur in siblings, but with relative infrequency; (2) it is rare for two or more generations to be involved; (3) whilst each twin is usually affected when of monozygotic origin, authentic exceptions have been recorded; (4) there have been several instances in which each twin of dissimilar pairing has been affected, such as the example reported here.

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