Progress

August 12th, 1931.—Patient was given morphine 1/4 grain, and laid face downwards, his arms resting on a high window-ledge, the lower part of the thighs on an operating table, which was lowered to its extreme limit, his body being curved, and with the shoulders about 2 feet higher than the knees. He had to be supported by two porters, one each side, holding a shoulder. Plaster-of-Paris was applied from the shoulder to the greater trochanter. An x-ray taken next day showed the result—complete reduction of the fracture (Fig. 2). Immediately the plaster jacket was applied he was very comfortable and in no pain. Next day there was some return of power in the left leg, and he could contract some groups of muscles, and he complained of tingling in his legs. The bowels were costive, and an enema, aided by pituitrin, was necessary to secure an evacuation.

During the next few days motor power and sensation gradually returned, particularly on the right side, reflexes on both sides being, however, still absent. Urine was drawn off twice daily by catheters under strict aseptic precautions.

August 26th, 1931 (fifteen days after the accident).—The patient passed 12 ounces of urine normally, but he had to be catheterized until September 13th, since which time he has been able to void in the usual manner. Motor power and sensation and reflexes returned gradually. By August 24th there was complete recovery.

October 10th.—He was allowed up and out of bed.

October 16th.—Able to walk unaided up and down the ward.

December 21st.—Plaster removed.

February 1st, 1932.—Electric reaction of muscles of lower limb showed normal responses and complete recovery. He could now walk unaided. X-rays taken later confirmed the reduction. The spine was in excellent position, and there was no atrophy of body of third lumbar vertebra. He would now have been able to resume his work but for polyarticular rheumatism, an intercurrent infection.

SUMMARY

This case illustrates a simple method of reducing severe comminuted fracture of the spine, accompanied by severe cord injury. It would have been impossible by any other method to approach, replace the fragments, and maintain them in position. He has recovered completely, both as regards his fracture and the cord injury. This method provides an easy way of nursing patients, changing their position, and avoiding the usual complications of bed-sores and respiratory troubles.

I wish to express my thanks to Mr. Percival P. Cole, F.R.C.S., under whom this case was admitted, and by whose kindness I had the opportunity of treating the case and publishing these notes.

CHRONIC GASTRIC ULCER IN A BOY AGED 13

BY

MICHAEL OLDFIELD, B.M., B.CH.

(With Special Plate)

Chronic gastric ulcer is rare in children, although acute peptic ulceration, both of the stomach and of the duodenum, is not uncommon in infants under a year old. Acute and chronic ulcers are more common in adult life, and it would be interesting to know what percentage of patients who come for treatment at a later date have had preceding ulcer dyspepsia in childhood. Proctor¹ describes sixteen such cases at the Mayo Clinic.

Children are rarely brought up for treatment for dyspepsia of the ulcer type, since this is only associated with the chronic disease. They are seen more commonly following the dramatic complications of acute ulceration,

such as melaena, haematemesis, or perforation. Paus,² Theile,³ Robinson,⁴ and Holm⁵ record cases of perforated chronic gastric ulcer in children, which were operated upon successfully; and Proctor,¹ Weber,⁶ and Miller⁷ report cases of chronic gastric ulcer in childhood not submitted to operation. Among 1,596 cases of gastric ulcer observed in the Mayo Clinic, only one occurred in a child. Professor Stewart,⁸ in a series of 200 cases of chronic gastric ulcer coming to post-mortem at the General Infirmary at Leeds, found none under 10 years, and three between 10 and 20 years of age. Deaths from chronic ulceration are obviously extremely rare in childhood. It is possible, however, that if a careful history were taken, an account of a preceding typical dyspepsia in childhood might be obtained in many adult cases of chronic peptic ulcer. This would emphasize the importance of giving rigorous and prolonged treatment to children suffering from chronic dyspepsia.

CASE REPORT

H. W., a pale, thin boy, aged 13, was admitted to the General Infirmary at Leeds, under the care of Dr. Veale, on December 4th, 1931, for haematemesis.

History.—When the patient was 11 years old he had a series of sore throats, followed by "indigestion." This consisted of an aching pain in the epigastrium when he was hungry. The pain was so severe that it wakened him during the night. It was relieved by food, and was occasionally accompanied by vomiting. Symptoms were intermittent; bouts of pain, lasting two to three weeks, alternating with periods of freedom. The pain gradually grew worse, but it was not for over a year after the onset of this symptom that the patient was taken by his mother to the doctor. Frequent small milk feeds and alkalis were given, and later tonsillectomy was performed. The symptoms disappeared within a fortnight.

Before breakfast, on the morning of December 4th, 1931, the boy had a sudden stabbing pain in the epigastrium and mid-sternum. He became thirsty, and then vomited about half a pint of dark red clotted blood. He was admitted to hospital the same day.

Physical Examination.—His face was pale, his lips and conjunctivae were blanched. Pulse 120. Temperature 98.1°. Respirations 24. There was slight epigastric tenderness. There was no evidence of bleeding from the nose or mouth. The spleen was not palpable. The heart, lungs, nervous system, optic disks, and urine showed nothing of note. No septic foci were found in the nose, ears, or throat.

Special Examinations.—(1) Occult blood was present in the faeces. (2) A blood count showed mild secondary anaemia. (3) A Rehfuß test meal showed a "high normal" acidity—that is, 1½ hours after the meal the total acids were equivalent to 80 c.cm. N/10 NaOH per 100 c.cm. of gastric contents. Free hydrochloric acid reached 0.2005 per cent., equivalent to 55 c.cm. N/10 NaOH per 100 c.cm. of gastric contents. There was slight delay in emptying of the stomach, complete after 2½ hours. (4) X-ray examination showed a small ulcer crater on the posterior surface of the stomach, close to the lesser curvature, three inches from the pylorus.

Progress.—The patient was treated medically by prolonged rest in bed, starvation, followed by Hurst's dieting. Olive oil and belladonna were given alternately before meals; alkalis after meals. He remained in bed in hospital for seven weeks, and was free from symptoms when discharged. He stayed in bed at home for another five weeks.

On March 1st, 1932, he came up to hospital. A radiograph was taken; no ulcer crater was to be seen. A Rehfuß test meal showed the gastric ulcer diathesis to be present still. There was a "high normal" acidity—that is, in the specimen taken 1½ hours after the meal the total acids were equivalent to 95 c.cm. N/10 NaOH per 100 c.cm. of gastric contents. Free hydrochloric acid reached 0.219 per cent.—that is, equivalent to 60 c.cm. N/10 NaOH per 100 c.cm. of gastric contents. There was still slight delay in emptying of the stomach, complete after 2½ hours. Seven weeks have elapsed

since the boy was discharged from hospital; so far there has been no return of symptoms.

I am indebted to Dr. R. A. Veale for permission to publish this case and to Professor M. J. Stewart for his kind advice.

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OEDEMA IN THE NEWBORN*

BY

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Oedematous conditions in the newborn are of fairly common occurrence, but experience seems to show that it is difficult for the average man faced with a case of this kind to form a clear idea in his mind of the most likely cause of the disorder and of the appropriate treatment. A study of the textbooks does not usually help very much: they describe congenital oedema, oedema neonatorum, scleroedema, sclerema, sclero-oedema, etc., but no two authors seem to agree exactly as to the precise definitions.

With the idea of simplifying this subject a little I have collected a few cases, with oedema as the leading physical sign, in which it will be observed that the main aetiological factors are cold and sepsis. I am excluding entirely those rare cases in which the baby is born with generalized oedema, ascites, and hydrothorax, or with massive oedema of the limbs, and often dies a few hours later. In general practice it is very unlikely that such a case will ever be seen, in view of the fact that only one example of this condition has been observed at Queen Charlotte's among 12,000 babies born during the last six years.

In my experience the commonest cause of oedema in the newborn, localized or generalized, is cold, and in my opinion it is absolutely essential that this should be realized by every general practitioner or nurse in charge of a newborn infant. The temperature, as taken with the ordinary clinical thermometer (with a low limit of 96°) in the axilla or groin, gives quite a false idea of the actual temperature of the infant. One must use a subnormal thermometer with a low limit of 88°. There is no difficulty in getting these in practice, and they are not expensive. The temperature must be taken rectally. Neglect of these simple precautions leads to much trouble when dealing with newborn infants, especially when they are premature or debilitated. It is quite common to hear a nurse say that the baby's temperature is perfectly normal, somewhere about 96° (the lowest reading on her thermometer), when, on putting a hand on the baby's abdomen and legs they feel definitely chilly, and the temperature taken rectally with a subnormal thermometer is found to be 93° or even lower. The importance of warmth for the newborn infant is, I think, still not fully appreciated, and, naturally, the more feeble and premature the child the more the necessity for keeping a close watch on the temperature. I have seen a child, three or four days after birth, in a cold house in a bad slum area, quite

chilly and blue, gasping for breath and apparently dying: rectal temperature—89°. On putting the baby into a hot bath for twenty minutes, and insisting on hot bottles, changed every four hours for twenty-four hours, being placed round it, there has been prompt recovery.

Probably many infants are certified as having died of "atelectasis," "prematurity," "congenital debility" and the like, when in reality death is due to the effects of cold.

INFLUENCE OF COLD

The newborn infant, then, is particularly susceptible to the effects of cold. The following cases, all of which occurred in this hospital, are, I think, excellent examples of cold acting as a cause of oedema.

CASE I

Twin boy, seen on December 3rd, 1931, on the ninth day of life, at Queen Charlotte's Auxiliary Hospital, Goldhawk Road, because of swelling of the penis. Birth weight: 5 lb. 6 oz. The weight had gone down to 5 lb. on the third day of life, but by the ninth day it was 5 lb. 8 oz. The mother was a primipara, aged 27, perfectly healthy; the delivery was normal, the first twin being a L.O.A., the second a L.O.P. This case was the first twin.

On the sixth day, mild oedema of the prepuce was first noticed, and when seen on the ninth day the oedema was very marked: no oedema of the scrotum. There was no difficulty in micturition and the urine was normal. Both testicles were in the inguinal canal. There was also considerable oedema of the eyelids, and pitting oedema of both feet and shins and of the scalp. Heart, lungs, abdomen, and throat were normal. Pulse rate 120. Since birth the infant had had a subnormal temperature, varying from 95° to 96°. No hot bottles had been used, but the infant had been kept in a cot near a gas fire. The baby's feet and head felt cold, and the rectal temperature was taken with a subnormal thermometer, and found to be 93°.

The baby was put in a hot bath at 105° till the temperature was 99°, and hot bottles were put in the cot, and the rectal temperature was taken four-hourly for the next four days. Next day the temperature was 96.8°, and there was much less oedema. By December 6th, 1931, the oedema was completely gone, and, as was expected, with the disappearance of the oedema the weight dropped 4 oz. in the three days. One month later the baby was completely normal.

Final diagnosis: Oedema due to hypothermia.

CASE II

In view of the above case the other twin was examined, although supposed to be quite normal. Birth weight: 5 lb. 4 oz. Weight on the ninth day: 5 lb. 4 oz. Here also the temperature had always been low, varying from 96° to 95°. On examination there was pitting oedema of the scalp, both feet, shins, and thighs, also slight oedema of the eyelids and prepuce. Urine normal. Heart, lungs, abdomen, normal. The rectal temperature was 93°. Similar treatment was adopted and in four days all trace of oedema had vanished; the loss of weight in this case over four days was 1/2 lb. One month later the baby was perfectly normal in every way.

Final diagnosis: Oedema due to hypothermia.

Oedema may occur (1) if the infant is put into a warm bath immediately after birth, without ever having had a subnormal temperature, and (2) if the temperature is subnormal. In the latter case the oedema is more frequent and more severe. Cold, therefore, is a contributory factor, but the main factors here are feeble development of the circulatory system, cardiac weakness, and blood vessels that are delicate and fragile. The oedema of the feet is largely dependent upon the effects of gravity: this can be easily demonstrated by allowing the arms and legs to hang down, when marked cyanotic swelling of the dependent parts soon develops. If the foot of the cot is raised for twenty-four hours, so that the baby's head is kept lower than the feet, the oedema of the feet diminishes in a few hours and may have

* Based on a clinical lecture given at Queen Charlotte's Hospital.

H. DAVID ISAACS: COMPRESSION FRACTURE WITH COMMINATION OF LUMBAR VERTEBRAE

FIG. 1.—Radiograph taken on August 11th, 1931, before treatment.

FIG. 2.—Radiograph taken on August 13th, 1931.

MICHAEL OLDFIELD: CHRONIC GASTRIC ULCER
IN A BOY

FIG. 1.—Showing small ulcer crater on posterior surface near lesser curvature of stomach. There is a translucent zone around crater corresponding to oedematous ulcer margins.

SIDNEY B. RADLEY: SUBPERITONEAL UTERINE
FIBROID

FIG. 1.—Naked-eye appearance of tumour.