a complete trial, and that reports that may be published before long may settle definitely the question whether in chloral-hydrate we have, or have not, a remedy of efficacy in malignant cholera.

ON ULCERATION OF THE FRÆNUM LINGUÆ IN PERTUSSIS.

By WILLIAM N. MACCALL, M.D.,

Surgeon to the Clinical Hospital for Children, Manchester.

THE occurrence of this ulceration, and its value as an aid to the diagnosis of whooping-cough, have received so little notice in this country, that I read with pleasure the observations of Dr. Elliott of Bristol in the JOURNAL of September 7th. Essentially, his experience confirms my own, and the only point of material difference between us is that I do not agree with his theory as to the relationship existing between this ulceration and whooping-cough. To this point, which has little or no practical bearing, I shall refer later.

The subject was written upon as far back as 1844 in Germany, and about ten years later in Italy and France. Since then, frequent references have been made to it by Continental writers. It first came under my notice during an epidemic of whooping-cough which prevailed here in the winter of 1869-70. I then carefully noted the condition of the frænum linguæ in all children suffering from coughs brought to the Clinical Hospital, where I was at the time house-surgeon. The results are to be found in a paper published in the *Glasgow Medical Journal* for February 1871. Since that time, I have usually observed the condition of the frænum linguæ in cases of pertussis. The result has been to confirm the conclusions I then formed, but, as I have not kept any statistical record, I may be pardoned for making a few extracts from my paper, bearing upon the observations of Dr. Elliott; the more so, because, if the paper have escaped the notice of Dr. Morton and Dr. Elliott, I may, *à fortiori*, assume it to be unknown to most of the readers of the BRITISH MEDICAL JOURNAL.

"I may premise that I did not find the ulceration in any case which did not prove to be pertussis, and therefore in the numbers given I have confined myself entirely to cases of that disease. Out of 252 children suffering from pertussis, in whom, without any selection, the condition of the frænum linguæ and adjacent parts was noted, the ulceration was found in 111, or about 44 per cent. In the great majority of the cases (*i.e.*, in 105 out of the 111) it was situated on the front of the frænum, and its presence in another situation was usually associated with some irregularity of the teeth. In three of the exceptional cases, the ulceration existed on the under surface of the tongue at the side of the frænum; in one of these, the central lower incisors were absent; and in another, they were very stunted; in the third, the condition of the teeth is not noted. In another case, where these teeth were set widely apart and the right was more prominent than the left, the ulceration appeared only on the right side of the frænum. In the remaining two cases, it existed under the tip of the tongue anterior to the frænum, the teeth being normally placed. One child presented, in addition to the ordinary affection of the frænum, a longitudinal abrasion on the dorsum of the tongue, corresponding with two decayed and rough upper incisors."

The theory as to the nature and cause of this ulceration, upon which I do not agree with Drs. Morton and Elliott, is stated in the next quotation.

"Bearing in mind the peculiarities of situation and the limited character of this ulceration, the observation of children during the paroxysms of coughing, forcibly suggests to us that it is due to a purely mechanical cause, and is not, as some observers maintain, a specific eruption. In most children suffering from pertussis, the tongue is protruded from the mouth, and the frænum becomes stretched, and rubbed in a slightly sawing manner upon the lower incisors, during the succession of rapid violent expiratory efforts, with occasional imperfect inspirations, and the final *reprise* which constitute the paroxysm. By the frequent repetition of this action, abrasion or vesication, and then ulceration, are produced."

"This idea of the causation is supported by other facts observed, which tend to show that the phenomenon is in some way connected with the presence of the teeth. Thus it is very rarely, in my own experience never, found in children before the appearance of the teeth, although pertussis affects them as characteristically, and often as severely, before the period of dentition as after it. On the other hand, it may be present at the earliest age after the appearance of the teeth, several of the children in whom I found it being from eight to nine months, and two of them only seven months old. And further, if present at all in older children who have lost the lower central incisors, it is not

on the frænum, but on some part of the tongue corresponding with the prominence of a particular tooth or teeth."

Dr. Morton has found the ulcer in one case where the child had not yet cut any teeth, and it is quite possible to understand its production in the manner described by me, even without teeth, under peculiar conditions of frænum or gums. But this is certainly very rare, and I myself, out of hundreds of cases that I have examined, have not yet met with it. It may be urged that if the mechanical theory be correct, we ought to find the ulcer in a larger proportion of cases; but its production in any one case would depend on the form of the frænum, the condition of the teeth, the severity of the paroxysms, etc. The manner of coughing is also an important element. All children do not protrude the tongue between the teeth in the way described; especially is this so with older children, who exercise more voluntary control over their efforts, and accordingly we find it less frequent among them.

The value of this sign as an aid to diagnosis may be briefly stated. Not unfrequently, from imperfect description of symptoms, or the existence of complications, we may be left in doubt as to whether we have pertussis to deal with or not. In such circumstances, the discovery of this ulceration gives certainty to what would otherwise remain only a probability.

"For, even granting its cause to be mechanical, in the sense I have explained, it is such a very rare thing to find in a child a cough, other than pertussis, of such a nature as to cause it, that we may regard it as characteristic of that disease, and accept without much reserve Bouchut's dictum 'that a child which coughs, and has this ulceration on or near the frænum linguæ, certainly has whooping-cough'. It has not, however, an equal value as a negative sign; being found only in a certain proportion of the children suffering from pertussis, and not in all, its absence does not prove that the case is not one of that affection."

Those who are interested in the subject will find details in the paper from which these extracts have been made, and in the writings of various authors there referred to.

ATTEMPTED SUICIDE BY CHLORAL-HYDRATE: RECOVERY.

By HENRY TIZARD, M.D., Weymouth.

I WAS requested on August 15th, at 12.30 P.M., to see Miss —, who was said to have taken poison of some kind between 8 and 9 o'clock the same morning. I was told that Miss — had been suffering from religious monomania for some time, her particular delusion being that her sins were so many and so great as to leave no possible hope of her salvation. I found my patient in bed, lying on her back, apparently in a sound sleep; pulse 80, regular, but small; respirations 28 per minute; pupils moderately contracted, but not altogether insensible to light. She had vomited some viscid yellowish-looking fluid, having no perceptible odour; and a frothy mucus was constantly oozing from her mouth. The symptoms somewhat puzzled me; but I considered they pointed more to poison by some salt of morphia than by any other drug.

By placing strong solution of ammonia under the nostrils and very forcibly pinching her, I could slightly rouse Miss —; but, on desisting, she immediately relapsed into insensibility. I attempted to give her strong coffee by the mouth, but found that my patient could not swallow, the muscles of deglutition being apparently paralysed. The urgency of the case induced me to send for assistance; and, on Dr. Griffin's arrival, I suggested that we should use the stomach-pump and employ electricity, to which he assented; and, whilst the necessary instruments were being procured, the fauces were tickled with a feather, and we further attempted to give an emetic of sulphate of zinc, but without success. We then used the stomach-pump, finding but very little in the stomach, which was freely washed out with tepid water; and at the same time we employed a Maw's electro-magnetic machine. Mustard poultices were also applied to the calves of the legs; and a pint of strong coffee was pumped into the stomach, but this was very soon rejected. Coffee was also given by the rectum. After the persistent use of faradisation for about an hour and a half, we had the great satisfaction of restoring our patient to consciousness; and, when able to speak, she told me she had swallowed, at 8 o'clock, two ounces of Corbyn's syrup of chloral-hydrate. This syrup contains, as is well known, ten grains to the drachm; so that Miss — must have taken one hundred and sixty grains of chloral-hydrate—almost one hundred grains more than is considered a full or, in many instances, a very dangerous dose.

I cannot but think that faradisation was the chief factor in averting

In this case a fatal issue, by sustaining the heart's action and vital powers, as well as by preventing the paralysis of that organ, said to be caused by an overdose of chloral-hydrate; thus affording time for the elimination of the poison by the natural channels. I may add that I verified Miss —'s statement of having taken two ounces of Corbyn's syrup of chloral, by going to the druggist who supplied it. Mr. — showed me the bottle from which it had been taken, with Corbyn's label upon it. An empty two-ounce bottle was also found secreted under the patient's bed. Miss — made a good recovery, and has been placed by her friends under proper control.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

EVELINA HOSPITAL FOR SICK CHILDREN.

EXCISION OF THE ANKLE-JOINT: RECOVERY.

(Under the care of Mr. MORRANT BAKER.)

FOR the notes of the following cases we are indebted to Mr. S. ANDREWS, late Registrar.

A boy, S. D., aged $7\frac{1}{2}$, was admitted for disease of the left ankle-joint of about six months' standing. Six months previously, without injury or other known cause, his left ankle-joint had become swollen, suppurated, and sinuses had resulted. Previously to this local disease, he had suffered from abscesses in various parts.

When admitted, it was noted that he was fairly well nourished, but had slight tendency to eczema of the face. The left foot presented much distortion; the toes were pointed outwards and downwards, causing undue prominence of the inner ankle. There was considerable puffy swelling both in front and behind the inner malleolus, as also general swelling of the joint, with two or three small sinuses in front. He was ordered cod-liver oil and syrup of iodide of iron. The limb was bandaged to an outside splint, to keep the foot in position. In a fortnight, no improvement occurred, but an abscess formed on the inner side of the ankle, which was opened and was found to communicate with the joint and with a sinus over the tendo Achillis.

Three weeks later, Mr. Baker performed excision of the joint. A probe passed readily from the sinus behind quite through the joint. A curved incision was made below and behind the inner malleolus, and this prominence was removed, no tendons being divided; a piece of necrosed bone was then removed from the upper and outer surfaces of the articulation. A cavity in the lower end of the tibia was thus left with rough walls, which were gouged slightly. What remained of the articular surface of the astragalus was also gouged. The wound was then stuffed with oiled lint, and one suture was inserted. The leg was placed on a back splint with a large heel-hole and a foot-piece.

A week after the operation, an anterior splint, bent nearly at right angles, was applied. In a month, the wound had nearly healed by granulation, five or six small sinuses remaining, but discharging little; a small abscess formed over the outer malleolus, but gave no trouble. His general condition was most satisfactory.

Six weeks after the operation, the splint was discontinued; there was a little dropping of the foot, and, to correct this, an elastic band was used to draw the foot up. At the end of six months, he was discharged.

When seen again, two months after operation, the patient could walk well and without pain. The foot was in good position; and the integuments were sound, all the sinuses having healed. The bones in the situation of the ankle-joint seemed firmly ankylosed.

SUBCUTANEOUS OSTEOTOMY OF THE FEMUR.

(Under the care of Mr. MORRANT BAKER.)

A boy, S. H., aged $7\frac{1}{2}$, was admitted on account of extreme deformity of the right lower extremity, the thigh being permanently adducted and flexed upon the trunk at an angle of rather less than 90 deg., and ankylosed at the hip. The leg was flexed upon the thigh, but not ankylosed. There was marked wasting of the muscles of the affected limb. There was no pain or tenderness; but the boy was quite unable to walk, on account of the malposition of the limb. The child looked well, and was moderately well nourished, but was pigeon-breasted. The thoracic and other viscera appeared healthy. This condition of things appeared to have resulted from hip-disease of four or five years' standing. In the early period of the disease, continuous

extension, it was said, was maintained for a year; then abscesses formed and were opened, sinuses resulted, and, when treatment was discontinued, the limb became contracted, as described, so that he was only able to limp about on crutches.

October 17th, 1877.—Mr. Baker performed osteotomy, with the view of straightening the deformed limb. A transverse incision rather less than an inch in length was made down to the bone, just below the trochanter major, and, by means of Maunder's chisel, the femur was cut through. The limb was then brought into a nearly straight position; but complete extension was hindered by the contraction of the superficial tendons at the upper part of the front of the thigh. To remedy this, the tendon of the adductor longus, at the inner side, and that of the tensor vaginae femoris, on the outer side, were divided subcutaneously. The operation was performed with the usual details of the antiseptic system of Mr. Lister. A stirrup was applied above the knee, so that the femur might be extended by traction applied to its lower end.

Three days later, the dressings were removed for the first time; the tenotomy-wounds were completely closed up, and the incision was nearly closed. His general condition was satisfactory.

The child continued to progress extremely well with the stirrup and weight, the limb being kept in position with sand-bags, and he was discharged from the hospital on December 18th.

Three months after the operation, the limb was found to be as nearly as possible in a straight line with the trunk. There was slight movement of the femur on the pelvis. The bone appeared to have united with the outer part of the shaft in contact with the inner side of the trochanter. There was some prominence of the upper and front part of the femur at the line of section. He walked perfectly erect without pain, using a boot with a high heel (two inches). The shortening of the right limb, as compared with the left, was a trifle over two inches.

ENLARGEMENT OF THE LIVER AND SPLEEN: THE HEPATIC SWELLING QUICKLY SUBSIDING UNDER MERCURIAL TREATMENT.

(Under the care of Dr. GOODHART.)

A male infant aged two months was brought to the hospital on September 14th. Its mother stated that, when a fortnight old, the abdomen was noticed to be swollen, and that it increased in size till a fortnight before she came. Since that time, it seems to have remained stationary. Before the swelling first appeared, the body was covered by a red rash, which was followed by desquamation. This was the third child. The first died of diarrhoea, the second at the age of four weeks with a swollen abdomen. There was no history of syphilis in the parents. The child was much wasted, pallid, and with a wrinkled state of the mouth and skin above the bridge of the nose. There was no trace of any definite syphilide, but the back was still scaling freely. The buttocks and anus were normal. The bones were all normal. The abdomen was very large and tense; its skin transparent, and the veins of its wall much distended with their current coursing upwards. The liver came halfway down to a prominent and dependent umbilicus. It occupied the epigastric and right and left hypochondriac regions. It appeared to consist of two somewhat rounded halves. It was not tender. The spleen was also much enlarged, coming down level with the umbilicus and occupying the greater part of the left flank. The respiration was harsh, almost bronchial, at the base. The heart was normal. The blood contained no excess of leucocytes. The red corpuscles were variable in size. The granular matter was in slight excess.

Some syrup of the iodide of iron was ordered at first, the abdomen becoming rather larger than smaller till September 28th, when it measured seventeen inches in circumference. The child was then seen by Dr. Goodhart, and a grain of hydrargyrum cum creta was ordered night and morning. On October 5th, the child had much improved; its cheeks had filled out, and it looked much more healthy. The abdomen had decreased in size, only measuring fifteen to fifteen inches and a quarter, instead of seventeen inches. The hepatic tumour was still very evident, but the spleen was less easily felt than before. The superficial abdominal veins were less distended.

October 12th.—The abdomen measured only thirteen inches and three-quarters. The child was still gaining flesh.

October 19th.—The hepatic swelling was now represented by an ill-defined tumour behind the upper part of the right rectus abdominis; the spleen being still hard and prominent. The mercury was continued till November 2nd, when some syrup of the iodide of iron was substituted for it, and under this treatment the child steadily progressed, with one very temporary exception on November 27th, when the liver increased slightly in size again. This appeared to be associated with constipation, which, throughout the child's attendance, was a rather