

The little patient was recommended for admission but no bed being then available, the infants' ward being full, a mixture containing bismuth and soda was prescribed. A week later the child was again brought to the hospital unimproved. It then occurred to me to give an antispasmodic and on account of its marked action upon the spasm of unstriated muscle, as shown in asthma, renal and biliary colic, and so on, opium was selected. The susceptibility of infants to opium—most of us carry in our minds the warning fact that one minim of laudanum has proved fatal to an infant—led to my prescribing a small dose with the intention of increasing it later. One minim of the tincture was added to ten ounces of water and the mother was directed to give the child one teaspoonful of this 20 minutes before each feed. A week later the patient was seen again in the out-patient department, the child having shown such marked improvement that the mother had refused to allow the child to become an in-patient when written for. Vomiting was said to be less frequent and the child seemed to be gaining flesh. During the next seven days the frequency of the vomiting had dropped to twice a day and the child was obviously greatly improved in appearance, although it is interesting to note that the mother now complained of the child's increased peevishness and irritability. Three weeks afterwards the opium was stopped but the vomiting beginning to return the mother was told to continue the opium and when the bottle was half empty to fill it up with cold boiled water and to continue the teaspoonful doses as before—a convenient, if somewhat rule-of-thumb, method of gradually reducing the dose. The child is now, some months later, plump and seems in no way abnormal.

Shortly after this case I saw an infant at the Bristol General Hospital suffering from daily frequent and forcible vomiting in whom I thought that I could detect waves of gastric contraction. The child was bottle-fed and certain modifications were made in the milk, and opium was prescribed as before. The recovery was rapid but I am unwilling to include the case as the diagnosis was not absolutely certain and also because modifications were made in the diet.

The next case came under my care at the Bristol General Hospital on Oct. 9th. One could not wish for a more typical case for the purpose of putting a certain treatment to the test. The patient, aged eight weeks, had been bottle-fed from birth, the mother having suffered from white leg. Shortly after birth the child had jaundice, otherwise it was "a fine strong baby." At the end of the first week the vomiting was first noticed and at the same time there was constipation. Various modifications of diet had been tried with no good result; the vomiting gradually became more forcible until the present time when the child lying in the cot would vomit over the side of the cot on to the floor. When I saw the child at the end of the eighth week there was great emaciation, the gastric waves were strong, and the pylorus was plainly palpable. No change was made in the diet in use at this time, equal parts of milk and water, but a teat bottle was substituted for one with a long rubber tube. Opium was prescribed as before, one-eighth of a minim in a drachm of water 20 minutes before each feed. A week later there was no improvement, so one-fortieth of a minim was ordered. It was subsequently found that very early the first bottle of medicine had been broken—how early the mother seemed disinclined to admit—and the child, for some days at any rate, had been without medicine. A week later there was distinct improvement in the appearance and vomiting had dropped in frequency to twice in the day and once at night. The scales of the local grocer having been requisitioned the child was weighed every other day and during the next fortnight, with surprising regularity, there was an increase of from one to four ounces in the two days. The improvement is continuous and the child is doing well.

Two cases successfully treated with opium are insufficient to allow one to claim that opium is a specific in this disease, but the following conclusions may be fairly drawn from them: 1. Some cases of spasm with hypertrophy of the pylorus may be successfully treated with opium in the ordinary routine of the hospital out-patient department. 2. In some cases modification of the diet, stomach washing, and tube feeding are not necessary to the cure. 3. No case should be subjected to an operation until opium has been tried, unless, possibly, some other antispasmodics,

such as the belladonna group, have been found equally efficacious.

NOTE.—Since the above was written I find in this month's *Scottish Medical and Surgical Journal* (article by Dr. John Thomson) that Heubner recommends tincture of opium (G.P.) in doses of from one-twentieth to one-tenth of a minim. Whether it is given before each feed or not I do not know. It is interesting to note that he considers operation unjustifiable in these cases. I may add that I have now under my care a third case, breast fed, aged three months, doing well as an out-patient under opium.

Clifton.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON A CASE OF SECONDARY PAROTITIS.

BY A. W. PEAKE, M.R.C.S. ENG., L.R.C.P. LOND.

I HAVE read with much interest the article on the Pathology and Prevention of Secondary Parotitis by Mr. Rupert T. H. Bucknall, which appeared in *THE LANCET* of Oct. 21st, p. 1158, and should like, with your kind permission, to place on record a case under my care which ended fatally on the date of publication of the paper.

The patient, a man, aged 88 years and eight months, had an abdominal growth which was diagnosed as carcinoma of the cæcum. There were increasing ascites and œdema of both legs. For the last few weeks of his life he kept his bed and lived on liquid food. His mouth was attacked by stomatitis some four weeks before death, with much fetor of breath and dribbling of saliva. A week later swelling of the left parotid appeared, accompanied by difficulty and pain in opening the mouth. The swelling gradually subsided and in eight days had disappeared, when the right parotid became inflamed, together with the submaxillary gland on the same side. Movement of the jaw was now attended with so much pain that considerable persuasion was necessary to induce the patient to take any nourishment. The parotid enlargement increased until his death on Oct. 21st. On the morning of that day when I saw him he was very drowsy. His temperature was 100·8° F., his pulse was 124 and thready, and his breathing was hurried, with loud tracheal râles. The swelling then was enormous; the overlying skin was red and shiny and the tumour was hard and brawny, with a softening centre below the angle of the jaw. The right upper eyelid was so œdematous that the globe could not be exposed. The drowsiness deepened into coma, in which state he died.

Bishopston, Bristol.

A CASE OF FRACTURE OF THE FIRST CERVICAL VERTEBRA.

BY WILLIAM EWART MAW.

RECENTLY, I was called to see a man who had fallen down some area steps, eight or ten in number. On my arrival at the house, ten minutes or so after the message was received, I found an elderly man lying at the foot of the stairs quite dead; the heart had ceased to beat and the extremities were becoming cold. It was subsequently ascertained that he was 74 years of age. Beyond three or four superficial abrasions on the top of the scalp no injury could be detected. An inquest was of course necessary and at the post-mortem examination all the organs were found to be in a healthy condition with the exception of a little atheroma about the valves of the heart and aorta. On opening up the vertebral column, however, it was seen that the posterior arch of the first cervical vertebra was broken off and although held in position by the ligaments could be moved by the finger. The fracture was quite symmetrical on both sides and was just anterior to the grooves for the vertebral arteries. There was no displacement of the bone and no indentation was perceptible on the spinal cord, either

anteriorly or posteriorly; but as death was stated to have ensued immediately after the fall it is possible that the head was forced backwards upon the spine, thus nipping off the posterior portion of the atlas, and that death was caused by the pressure of the odontoid process of the axis.

I have not been able to find a record of a similar case where the fracture has been so complete and symmetrical and I think the case worth recording.

Carlton Vale, N.W.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Præmium.

ST. GEORGE'S HOSPITAL.

A CASE OF PERFORATION OF THE DUODENUM BY A
BODKIN; LAPAROTOMY; RECOVERY.

(Under the care of Mr. T. CRISP ENGLISH.)

FOR the notes of the case we are indebted to Mr. Lawrence Jones, surgical registrar.

A girl, aged 16 years, was admitted into St. George's Hospital on Sept. 16th last with the history of having swallowed a broken bodkin two days previously. The details of the accident were somewhat curious. She was lying in bed on her back, using the bodkin as a toothpick; she fell asleep and awoke with a pain in her throat which made her cough; she then felt at the back of her pharynx the bodkin, her attempts to remove which only succeeded in pushing it further down, and she finally swallowed it. Since this occurred she had been kept in bed on a fluid diet and purgatives had been given without the desired effect. The presence of the foreign body had caused no symptoms beyond a pricking pain in the right hypochondrium, and when she was seen its existence was only indicated by slight tenderness on deep pressure in that region. Exposure to the x rays demonstrated that the bodkin was situated in the right side of the abdominal cavity above the umbilicus, apparently in the region of the pylorus or duodenum, lying transversely. After a consultation it was decided to watch the case and the girl was kept in bed, being treated with suitable dietary and purgatives, but nothing further occurred beyond the persistence of some slight pain which seemed to shift vaguely about the abdomen. On the 22nd she was again photographed and the bodkin was now seen to be lying three inches to the left of the umbilicus and rather below it; on this occasion its shadow was much more clearly defined than at the first exposure. Again on the 26th it was found in the same position, but still no symptoms arose, and the x rays seemed to indicate the passage of the body from the stomach to the descending or sigmoid colon; it was thought that the bodkin would pass naturally and that an operation was not called for. Symptoms, however, began to make their appearance on the 28th, when there was more severe pain in the right hypochondrium shooting up to the axilla, and in the evening and after tea on the following day the pain became suddenly very acute and there were definite rigidity and tenderness over the right side of the abdomen.

In the absence of the surgeon under whose care the patient was Mr. English saw her and decided to operate. The abdomen was accordingly opened by an incision four inches long through the upper part of the right rectus. The peritoneum was injected and sticky and the colon was much dilated. The bodkin was found projecting through the outer aspect of the second part of the duodenum from which it was withdrawn. The small perforation in the viscus was closed with two Lembert stitches; a gauze drain was inserted owing to the presence of peritonitis in the neighbourhood. Considerable pain and some vomiting followed the operation but after the third day convalescence was uneventful. The sutures were removed on the fourteenth day and the patient left the hospital on Oct. 25th completely recovered. The broken bodkin was found to be two and a

half inches long, the rough broken end having perforated the duodenum.

Remarks by Mr. LAWRENCE JONES.—Apart from the rarity of an operation for the removal of a foreign body from the duodenum this case is of considerable interest as showing the occasional fallacy of the x rays which here seemed to demonstrate the passage of the bodkin from the pylorus to the colon, whereas in all probability it had been on the first exposure situated near the pylorus and, falling back again on to the greater curvature of the stomach, had remained in that position when the other two examinations were made. This doubt as to the position of the bodkin had been the chief argument in favour of waiting for localising signs.

Many instances are on record of foreign bodies having been swallowed and their infinite variety is notorious. For the most part they either are prevented by their size, shape, or number from passing the pylorus or else they are expelled in the natural manner. Of the former class there are numerous examples in which the foreign body has been removed through the mouth or by the operations of cesophagotomy and gastrotomy. Mayo Robson¹ mentions extraordinary collections of articles which have been safely extracted from the stomach (in one instance "42 cast-iron garden nails 1½ inches long, 93 brass and tin tacks from ½ to 1 inch long, 12 large nails, three collar studs, one safety pin, and one sewing needle") and he cites Loretta who removed several needles from the stomach and others from the left lobe of the liver of a woman who had attempted suicide. In another case recorded by H. H. B. Macleod² the list included "33 hairpins, 14 sewing needles, five safety pins, 27 nails, 12 pins, and 17 fragments of glass." It is, of course, hopeless to expect any natural relief of the presence of such amazing collections as these. In the case, however, of single bodies accidentally swallowed they often seem to be able to negotiate the various curves of the intestinal canal and to appear in the stools when once they have safely passed the pylorus. The time of transit varies; it may be comparatively short, as in Norton's case,³ in which a pin 3½ inches long traversed the alimentary tract of a 13 months old child in 21 hours, and in Eshner's patient,⁴ who passed a shawl pin four days after ingestion, or it may occupy as long a time as four weeks, the time taken by the safety pins mentioned by Owens⁵ and Solomons.⁶ Reference has been especially made to these four instances to show that even pointed bodies such as needles can pass naturally without inflicting any damage on the walls of the canal. If these bodies are not passed naturally their removal is effected by surgical means, either because they have been shown by the x rays or by the constant situation of the pain they cause to be making no progress, or else because their presence is considered to be a menace to the life of their possessor. Mr. R. Clement Lucas⁷ has reported the removal of a nail two inches long from the second part of the duodenum of a child who had swallowed it four weeks before, during which period it had been shown by the x rays to have retained its original position to the right of the spine reaching from the first to the fourth lumbar vertebra. Mr. C. W. Mansell Moullin⁸ removed a broken hatpin four and a half inches long from the small intestine just above the ileo-cæcal valve, constant localised pain being the chief indication for the operation. Foreign bodies which give trouble after their passage through the pylorus generally do so by the formation of a local inflammatory mass in their neighbourhood, the existence of the body, frequently a fishbone, being often unsuspected before operation, as it was in the cases of Morton⁹ and Beach,¹⁰ the latter of whom considered the mass with which he had to deal probably malignant. Piquaud and Grenet and Blum¹¹ have placed on record post-mortem examinations in which the cause of death was discovered to be an abscess around a diverticulum of the ileum which had been perforated by a fishbone, and an extraordinary simulation of strangulation due to the erosion of a knuckle of gut in

¹ Diseases of the Stomach.

² Practitioner, September, 1905.

³ Boston Medical and Surgical Journal, 1893, vol. cxxviii., p. 336.

⁴ Medical News, 1892, vol. lxi., p. 467.

⁵ Medical Record, 1887, vol. xxxi.

⁶ Pediatrics, 1898, p. 295.

⁷ Report of the Society for the Study of Diseases in Children, 1900, 1901.

⁸ THE LANCET, May 9th, 1896, p. 1284.

⁹ Brit. Med. Jour., 1894, vol. i., p. 241.

¹⁰ Boston Med. and Surg. Jour., 1898, vol. cxxxix., p. 489.

¹¹ Bulletins et Mémoires de la Société Anatomique de Paris, 1900, p. 390.