respiratory passages are rendered acid a medium is formed which is inimicable to microbial growth.

Note on Immunity from Second Attack.

Navy.—Of 321 cases in patrol in the July epidemic, 2 had return attacks in the October-November epidemic.

Army.—A company of Royal Garrison Artillery had 25 cases in July. None of these were attacked in the October-November epidemic. In a battalion: Of 21 cases of the July epidemic traced none were attacked in that of October-November.

N.E. Works.—From July 10th to 23rd, 73 males and 59 females were attacked; from October 16th to 29th, 29 males and 61 females. Two males and four females were attacked in both epidemics.

From the above figures it would therefore seem that an attack conferred immunity for a certain time.

REFERENCE.

¹ BRITISH MEDICAL JOURNAL, November 18th, 1916.

INTUSSUSCEPTION DUE TO POLYPUS OF SMALL INTESTINE.

BY

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THE following case is of interest in view of the number of attacks spread over a long period.

History.

L. H., aged 5, had been under the care of Dr. Watts of Haddon Close. He reported that this boy had suffered all his life from acute intestinal paroxysmal attacks, preceded by vomiting, and followed by tenesmus with the passage of blood and slime. They varied in severity, lasted from twenty-four to thirty-six hours, and occurred about every six weeks. The pain during several of the attacks was most marked in the right iliac fossa. They were thought at one time to be due to chronic constipation, but they persisted even when the bowels had been carefully attended to. On two previous occasions the child had been admitted to hospital, but in each instance the attack passed off, and there seemed to be no direct evidence of intussusception.

Operation.

On April 18th, 1919, he was admitted to the Radcliffe Infirmary under my care. The pulse was 120 and the temperature 99° F. He was then suffering severe abdominal pain; there was some distension, and a mass could be felt in the transverse and descending colon. On examining the rectum a little blood came away on the finger.

The diagnosis of intussusception was made and operation at once undertaken. An incision was made in the middle line below the umbilicus, and the apex of the intussusception found to be in the descending colon. Reduction was easy at first until the appendix appeared, when there was a hitch, due to a lump which could be felt in the caecum, and which refused to pass back through the ileo-caecal valve. Time and patience overcame this difficulty, and reduction was eventually obtained.

The mass, which was about the size of a walnut, was situated in the small intestine eighteen inches from the ileo-caecal valve, the bowel wall being dimpled on the anti-mesenteric border, where it was attached. A longitudinal incision was made in the bowel, and a sessile polypus ligatured and removed. The incision in the bowel wall was closed transversely, and at the same time a very long appendix was removed.

After-History.

The child made a good recovery, but six weeks after the operation there was a slight attack of abdominal pain which soon passed off. The polypus proved on examination to be an adenoma.

The intussusception was of the entero-colic type, the small intestine with the polypus at its apex passed through the ileo-caecal valve for some distance, the caecum, appendix, and colon being subsequently drawn in. The remarkable feature of the case is the attacks of pain, which appear to have occurred at intervals ever since birth. It is probable that in the previous attacks the intussusception was confined to the small intestine, the polypus approaching to or reaching the ileo-caecal valve, but not passing through it until the final attack.

THE National Academy of Medicine and the Surgical Society of Rio de Janeiro are compiling a catalogue of all medical publications that have appeared in Brazil within the past hundred years. This catalogue will be distributed at the celebration of the Centenary of Independence which is to be held in 1920. A Congress of Medicine will be held at the same time in Rio de Janeiro under the direction of Professor Fernando Magalhães, president of the Sociedade de Medicina e Cirurgia.

A CASE OF STRANGULATED HERNIA WITH VOLVULUS.

BY BASIL HUGHES, D.S.O., F.R.C.S.,

MAJOR R.A.M.C.(T.F.).

THE following case is of interest for several reasons: First, volvulus occurring in a hernial sac is rare; secondly, the symptoms were remarkably mild considering the condition that existed; and thirdly, the patient gave no trouble during convalescence and the wound healed by primary intention despite the offensive nature of the sac contents.

W. R. was admitted to No. 39 Stationary Hospital on February 14th, 1919, suffering from left-sided strangulated inguinal hernia.

History.—He had had a small left-sided hernia for some months. The day before admission to hospital, after a bout of coughing, the hernia came right down into the scrotum, causing pain and vomiting.

Condition on Admission.—He vomited a brownish inoffensive fluid; he did not seem particularly distressed and he had not an abdominal facies. The temperature was 99° and the pulse 66, good, regular, and steady. He had passed neither flatus nor faeces since the previous day. The abdomen was distended, not particularly tender, but he complained of some pain in the epigastric region. No visible peristalsis was observed. There was a large tender tumour occupying the left inguinal canal and the left side of the scrotum, and the skin of the scrotum at one spot was red and tender. There was no impulse in the mass on coughing; there was definite fluctuation and the tumour was resonant to percussion.

Operation.—The usual incision for the radical cure of hernia was made, but continued a little way on to the distended scrotum. On opening the sac a quantity of blood-stained and very foul fluid escaped. A large gangrenous mass of omentum clothing a loop of gangrenous large intestine was present. The internal abdominal ring was next enlarged, and both bowel and omentum pulled down until healthy tissue was reached. It was then found that the bowel was twisted on itself at the internal ring and that a true volvulus existed. Healthy bowel was pulled down with difficulty. The gangrenous omentum was removed and the gangrenous bowel resected, end-to-end anastomosis being performed. This done, the anastomosed bowel was returned and the radical cure of the hernia was completed, a small glove drain being left under the skin owing to the infected condition of the contents of the sac. The abdomen was then opened by a left pararectal incision, as I was not wholly satisfied as to the true state of affairs. It was then ascertained that the portion of the bowel dealt with was the pelvic colon, that the anastomosis was satisfactory, but that there was fluid present in the peritoneal cavity which was blood-stained but inoffensive. No peritoneal drain was employed.

Curiously enough the wounds healed by first intention, though the inguinal wound was red and looked like suppurating forty-eight hours after the operation. The glove drain was removed at the end of forty-eight hours and the stitches on the tenth day. The bowels moved on the fourth day, and the patient made an uninterrupted recovery.

THE MOVING-WATER BATH.

BY

LIEUT.-COLONEL A. D. WEBSTER, V.D., O.B.E., M.D.

THE effects, both reflex and mechanical, of moving water are apparent in sea-bathing. The pressure and impact of the waves are stimulating, flushing the skin and calling into more or less activity many muscle groups. The surging and the spray below a waterfall have a similar action and reaction. These effects and results have been happily obtained and applied to many morbid conditions of wounded soldiers. It has been found that the muscles of the injured part are invigorated and their nerve connexions restored more rapidly under the influence of moving water. Earlier mobilization is secured.

The temperature of the water is a prime factor and its maintenance a necessity. This temperature need not be very high (cool 65° to 70°, tepid 80° to 85°, or warm 95° to 100° F.), but the effect of the moving water gives the impression through the skin nerves that the temperature is lower than it actually is.

The effect on the tissues resembles that produced when salt has been added to the water or carbonic acid gas generated. The moving water in the bath may be electrified for additional effect, the current being taken from a dry cell faradic or galvanic battery, or the sinusoidal current may be employed.