

required, even when the blood has become concentrated by severe diarrhoea. I am rather doubtful if the blood specific gravity will prove so important a guide in the treatment of epidemic enteritis by the Rogers method as it appears to be in the case of cholera. Probably those who now working in the wards at Shadwell will soon be able to settle this question.

It is an undeniable fact that usually the specific gravity of the blood has not much importance from the clinical point of view, and it was only when asked to assist Major Rogers that my attention was directed to devising a means whereby the labour of making up so many glycerine-water mixtures to a prescribed degree of specific gravity might be lightened. No one, however, can read Major Rogers's book on cholera without being impressed by the important part which the determination of the blood specific gravity plays in his system of treatment, and it may well be that this is one of those exceptions which go far to prove the rule. That a parallelism exists between the specific gravity of the blood and the hæmoglobin content of the red cells is well known, and both Hammerschlag and Schmaltz have constructed tables showing the percentage of hæmoglobin, corresponding to different degrees of specific gravity. The suggestion has been made that the hæmoglobin content could be deduced from a determination of the specific gravity of a sample of blood, but the changes in the plasma in severe anæmia, leukæmia, dropsy, and diarrhoeal disease render this practice unreliable. In conclusion, I have to thank Mr. Elms for independently confirming the figures given in the table.

Shadwell, E.

Clinical Notes :

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTES ON A CASE OF GASTRO-ENTEROSTOMY.

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THE fact of a suture remaining dormant for three years and then being extruded in the happy manner described below is, I believe, unusual, and therefore the case seems worth recording.

The patient, a female, aged 32 years, was admitted to hospital in June, 1907, with a history of 17 years' ill-health. She had a sallow, muddy complexion, looked thin and badly nourished, complained of more or less continuous indigestion and constipation, and stated that she had been under medical treatment off and on for many years. There was no dilatation of the stomach or any other abnormal physical condition discoverable. I advised exploration with a view to gastro-enterostomy.

The operation was performed on June 6th, the abdomen being opened by a vertical incision above and to the left of the umbilicus and lateral dislocation of the left rectus muscle. A chronic ulcer was found near the lesser curvature and pylorus. This was left alone and a posterior gastro-enterostomy performed. The points especially observed were: (1) to take the highest possible part of the jejunum; (2) to make the incision in the stomach wall reach the greater curvature; and (3) to fix the margins of the opening in the meso-colon to the jejunum below the anastomosis by three points of suture, one anterior and two lateral, the whole line of suture being thus occluded within the lesser sac. Two continuous sutures of fine silk were used for the anastomosis in the usual way.

Recovery was uneventful and the patient was sent to the Weston Convalescent Home on July 22nd, returning from there a month later for inspection. She had gained considerably in weight, was in very good health, and immediately resumed her work as a domestic nurse, remaining at it in excellent health for nearly three years.

In June, 1910, the patient reported that she had noticed a gradually increasing swelling in her "stomach" for a few weeks, but that it caused her no inconvenience. On examination there appeared a globular fluctuating swelling, of the size of a large orange, presenting just above and to the left

of the umbilicus. The swelling was below the stomach and fixed to the anterior abdominal wall, but was quite free of the operation scar, which was scarcely visible. She was readmitted and the swelling was carefully incised under general anæsthesia, and without opening the general peritoneal cavity. About half a pint of pus, free from smell, came away. Gentle digital exploration of the cavity did not reveal its relation to the transverse colon, and extensive manipulation being obviously undesirable, this point was not determined. A large drainage-tube was put in, and the outcome was awaited. Three days later a piece of silk, $7\frac{1}{2}$ in. long, came away in the discharge. The wound then rapidly healed. The patient soon returned to work again, and has remained quite well.

This case is a fortunate example of the true function of a "foreign body" abscess—a collection of fluid formed for the twofold purpose of boring a way to the surface and floating out the offending substance. It also confirms the view that silk is an unnecessarily permanent material for internal suturing.

Bridgwater.

NOTES ON A CASE OF HEAT-STROKE OF THE HYPERPYREXIAL TYPE.

BY MARY A. BLAIR, M.D., B.S. LOND., B.Sc. N.Z.

A WOMAN, aged 54, an inmate of St. Pancras Workhouse, was seen by me on the morning of July 22nd last, complaining of slight malaise. During the day she did her usual work in the kitchen of the workhouse, but she complained of thirst and was observed to be drinking large quantities of water. The temperature of the kitchen is reported to have been 91° F. About 6 P.M., while sitting on a bench in the workhouse yard, she was taken suddenly ill and was removed to the receiving ward.

On arrival there the woman was found to be very pale, with lips blanched, and the veins of the neck engorged. She was breathing without difficulty and her pulse was 100 and of good quality. She spoke a few words intelligently and then became incoherent, and afterwards restless and irritable, violently resisting examination. Her jaws were tightly clenched. Her pupils were at first slightly dilated, but in a few minutes they contracted, and complete unconsciousness supervened. The motions were passed under her. They were yellow and semi-fluid. Her skin felt very hot, and the temperature, taken in the axilla, was found to be 108° . Convulsive movements then began in the lower limbs and spread to the rest of the body. There were constant champing movements of the jaws throughout the attack.

Some cold sponging was done and the patient was removed to the ward. The whole body was then sponged with ice-cold water, but the temperature (taken in the rectum) remained at 105° . The patient was then covered with wet lint on which pieces of ice were placed, and finally the trunk and limbs were rubbed with pieces of ice. By 9 P.M. the temperature had fallen to 101.6° ; the ice applications were discontinued and the patient was covered with a sheet. There was no vomiting, but several loose motions were passed. The convulsions continued, beginning sometimes in one or both arms and sometimes in the legs and spreading to the trunk. Movements of the jaws went on constantly. At 9 P.M. the convulsions became very severe, the limbs contracting so violently that it required several nurses to keep the patient on the bed. The pulse and respirations remained good. Chloroform was now begun and continued to full surgical anæsthesia before the movements could be controlled. With lighter anæsthesia the movements returned. The temperature rose again to 104.4° , but then fell steadily, no further sponging being given. At 1 A.M. the administration of chloroform was discontinued and the patient was watched for an hour, during which there was no return of convulsive movements, and the temperature continued to fall. At 8 A.M. she suddenly recovered consciousness, as if waking from sleep. She remembered nothing since being in the workhouse the previous afternoon.

Throughout the attack the patient suffered from hyperpyrexia and convulsions alone. The pulse remained strong and only slightly increased in rate, and the respirations were unaffected.

Recovery has been complete. No sequelæ have been