THE TREATMENT OF ASCITES BY DRAINAGE.

BY

SIR JOHN O'CONOR, K.B.E., M.D. T.C.D.,

SENIOR MEDICAL OFFICER, BRITISH HOSPITAL, BUENOS AIRES.

THE two following cases may be of some interest in showing that an unexpected result may sometimes follow a measure of treatment undertaken as a forlorn hope.

CASE I.—*Hepatic Cirrhosis: Drainage: Recovery.*

A middle-aged estanciero, a "free liver," entered the British Hospital in September, 1917, with great distension of abdomen and anasarca of the lower extremities; the heart sounds were distant and feeble and the pulse 130; there was double basic congestion and dyspnoea with cyanosis; the urine was scanty and full of albumin and the hepatic dullness was almost obliterated. There was an ominous sign of the past—diffuse rupial scars.

To relieve urgent distress paracentesis was immediately performed, and six litres of ascitic fluid drawn off; on deep inspiration the liver could then be palpated beneath the costal margin; it felt as hard as the edge of a table but was not bossed. A mixture of potassium citrate, sodium bicarbonate, and ammonium citrate was given every four hours, along with pill "Baly," thrice a day, compound jalap powder 3j at night, and magnesium sulphate 3j each morning. An exclusive milk diet was prescribed.

Some relief was experienced for a few days, but the urine continued subnormal in quantity (20 to 30 oz. daily); by the tenth day he had filled up again, and general symptoms had reappeared. Tapping was repeated and 7 litres of similar liquid evacuated. A week later things were as bad as before, and as he appeared to be rapidly failing I tapped him with our largest size trocar, and, when some 6 litres of fluid had escaped, I passed a medium size soft rubber (Jacques) catheter, with the round end cut off, through the cannula into the abdomen; the cannula was coaxed out without dislodging the tube, and the latter was secured to the small skin wound by a silkworm-gut suture, a long tube was attached, and drained into a bottle at the side of the bed. A free flow (4 litres) ensued for three days. It ceased on the fourth evening. On the sixth morning the sister reported a marked increase in the output of urine (80 oz. in twenty-four hours). The tube was retained until the twelfth day, but nothing more exuded. The medical treatment was continued all the time; the daily excretion of urine varied from 70 to 90 oz.

Much to our surprise, this gentleman had a rapid convalescence—the pulmonary congestion quickly disappeared, the heart sounds became appreciable, the pulse slowed down gradually to 80, and only a faint trace of albumin remained when he left hospital three weeks later—in a violent hurry to get back to supervise the shearing.

Two months later he returned nominally to report himself, but in reality to place himself in the hands of a tailor for a complete new outfit. He was looking extraordinarily well, with quite a smart figure and debonair manner. I saw him again, a year afterwards, in good condition, before he retired.

CASE II.—*Cardiac Hepatic Block: Incompetence: Ascites: Drainage: Temporary Recovery.*

S. M., aged 50, an Italian, had been treated in hospital six times during the past three years for broken down compensation, irregular action of the heart, orthopnoea, and waterlogged legs and scrotum; the condition was relieved each time by morphine injections, digitalis, purgation, milk diet, and rest of a kind.

In October, 1917, he presented himself with enormous distension of the belly and slight oedema of lower extremities, without any apparent serious cardiac distress, though the heart was, as usual, irregular. He was tapped on the day of admission and 8 litres of ascitic fluid removed. Seven days later he insisted on returning to work (founder). Three weeks afterwards 6 litres were removed, and he disappeared three days later. Ten days afterwards he came again in the same state. As it was futile to attempt to impose reason on such an impossible fellow, I determined this time to do something that would anchor him in bed for some weeks—I tapped him with a large instrument, as in the previous case, and inserted a similar peritoneal drain. The flow ceased on the sixth day, and again it was noted that there was a sudden coincident increase in the daily quantity of urine (to 60 oz.). On the following day when I entered the ward I saw him sitting on the side of his bed; he kept on demanding the withdrawal of the tube, but I refused. After I retired he dressed himself and went out to the garden, and repeated this until the twelfth day, when the sister removed the tube (no liquid had passed since the above note on the sixth day). He left hospital the same afternoon.

Two months later he met one of our male nurses and told him to "tell the doctors that I am hard at work and enjoy my vino the same as ever." A short time after the poor fellow paid us his last visit for myocardial liquidation, without a murmur, and without a trace of ascites.

In both cases it is remarkable that the peritoneal exudation ceased a few days after free drainage was established, and that this cessation was followed by a sudden marked increase in the excretion of urine, which suggests that

drainage, by promoting re-establishment of circulation, admits of a temporary discharge of blocked organs from physiological bankruptcy, and that the relief of tension afforded by continued drainage facilitates the diuretic action of the medicines and diet employed.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

TETANUS WITH GENERAL SPASM CURED WITH SERUM.

THIS case is reported because instances of general spasm due to tetanus are not very commonly cured by serum, and because the cure was probably made possible by the toxin being absorbed in a diluted form from the surface of an ulcer, so that at no time was the concentration of toxin within the nervous system great.

A woman aged 42, healthy, with one child, had been troubled with varicose veins in the left leg for a long period; some six months before coming under observation she knocked her leg and a varicose ulcer developed. This ulcer was treated by a friend supposed to possess "medical knowledge" by the daily application to the ulcerated surface of "fresh green leaves," of what plant I have been unable to ascertain; this treatment was continued until about three weeks before I first saw her, when she was put on some simple home-made ointment. Two days before seeking my advice she noticed some stiffness about the jaw, which gradually increased in severity and was accompanied by pain in the back of the neck.

I first saw her on June 17th, in the evening, when she had well-marked trismus, but no general spasms, and a temperature of only 99° F.; as the mouth contained many septic stumps I was in doubt as to the cause of the trismus. She had general muscular spasms during the night, and on June 18th had well-marked stiffness of the back of the neck, with a temperature of 101° F.

Dr. Benthly saw her with me in consultation, and we agreed to the diagnosis of acute tetanus. She was immediately admitted to the Jersey General Dispensary; I excised the ulcer of the leg with a margin of healthy tissue, swabbing the raw surface with 1 in 20 carbolic acid, and at 10 p.m., whilst the patient was coming round from the anaesthetic, morphine gr. 4 was injected. Spasms were so frequent that it was necessary to give another 4 gr. of morphine at 1.30 a.m. No serum could be obtained on June 18th, but on June 19th, at 10 a.m., the spinal theca was tapped, and, after running off a corresponding quantity of cerebro-spinal fluid, 1,500 units of antitetanic serum were injected; the patient remained fairly quiet till 11 p.m., when morphine gr. 4 was given.

Daily injections of 1,500 units antitetanic serum were given until June 25th, the first three being intrathecal and the rest intramuscular; the patient was meanwhile kept under the influence of morphine. The spasms gradually decreased in frequency and severity until, on June 24th, none occurred; the patient got her first sleep on June 20th, and her first good night on June 26th. On June 27th she was able to open her mouth sufficiently to admit the spout of a feeder, and for the first time to swallow with ease.

A marked serum rash appeared on June 27th, and continued till about June 30th.

On July 6th the wound caused by excision of the ulcer was skin-grafted, and the patient was discharged cured on July 19th.

In this case the neutralization of the toxin by the antitoxin was well shown by the marked mitigation of the spasms which followed the injection. The case illustrates also the danger which may attend the use of popular old-fashioned remedies.

Jersey.

J. W. EVANS, F.R.C.S.

OBSTRUCTED MUCOUS SECRETION.

IN the course of tuberculosis dispensary work one sees a number of children illustrating the vicious effects of defective and disorderly mucous secretion. A typical case would be in the first ten years of life, more or less a mouth-breather, generally anaemic, somewhat underweight, with some cervical or submaxillary glandular enlargement, a varying amount of retraction of the chest, superficial thoracic veins overfull, and almost always a tumid or tympanitic abdomen. There is a history of restless nights, often with delirium, and of cough which is relieved by vomiting; appetite is fickle or absent at breakfast-time, and there is almost always mention of colicky pains in the epigastrium. The child's general condition improves as the day advances, and the appetite is frequently ravenous late in the day. School attendance aggravates the signs and symptoms, and exclusion is generally followed by speedy improvement. Deafness with