four months. He was first attacked in Calcutta during an epidemic. He suffered much pain in the bowels, with great bearing-down and tenesmus, and had thirteen or fourteen motions in the twenty-four hours. In coming home, several other men on board ship were attacked by the same disease. He used to pass blood and matter with the motions. He was living on junk and biscuits; and as the surgeon to the ship had died in Melbourne, there was no one to treat him, and no remedies were taken either in Calcutta or during the voyage home. He still continued to perform his duties on board ship, but felt he got gradually worse. On arriving in London, he commenced to eat fresh meat before applying for medical aid, and he improved slightly. He applied at this hospital four or five days after landing, and was admitted on the 27th of December, 1859. He was first treated with bismuth and opium three times a day, washed down by an ounce and a half of decoction of bael, and the recumbent posture ordered. A mustard plaster, and afterwards linseed poultices, were applied to the abdomen. All solid diet was prohibited, and he was confined to eggs and milk, with No. 2 diet. In a few days he had much improved; had only passed blood twice after his admission into the hospital; had lost the tenesmus; bowels moved once a day, and then once in two days. On the 4th of January, 1860, he was allowed to get up, and was put upon fish diet, since which he has been gradually improving. Discharged, well, a fortnight after admission.

UNIVERSITY COLLEGE HOSPITAL.

ACUTE DYSENTERY, WITH TYPHOID FEBRILE SYMPTOMS AND DELIRIUM; RECOVERY.

(Under the care of Dr. PARKES.)

THE patient who was the subject of this case, which we have called one of acute dysentery, was a cavalry soldier, with no previous history of the complaint. The prominent symptom, on his admission the second time, was the passage of a large quantity of blood in his motions, mixed with slime, and associated with abdominal pain. It seemed uncertain whether this was the result of dysentery. At any rate, there appeared to be no doubt that the source of the hæmorrhage was the large bowel, whatever the cause might be that gave rise to it. Added to his enteric symptoms, were some which strongly simulated typhoid fever, only that they disappeared somewhat speedily. Altogether the case is a curious one.

The last example of the idiopathic form of the complaint which was recorded in our "Mirror" (*vide* THE LANCET, vol. ii. 1859, p. 615), was that of a female in St. George's Hospital, under the care of Dr. Bence Jones. It ended fatally, and the amount of disease found after death was much greater than was anticipated from the mildness of the symptoms during life.

The following abstract we have condensed from the hospital case-books:—

Frank H—, aged twenty-five, a native of the West Indies, was admitted Oct. 3rd, 1859. Is a cavalry soldier; has been in the Crimea; has always had good health; was wounded in the neck by a shell fragment in the Crimea. About twelve months ago he fell down after free drinking, and remained forty hours quite insensible. He was bled, blistered, and leeches, and then recovered. He was in good health up to the end of July, when he was thrown from his horse, and fell with his side across a horizontal iron rod. This was followed by an attack of illness, jaundice set in on the third day, and his health generally was disordered. He suffered from frequent relapses from excess in drinking and smoking up to the time of his admission. He assigns the accident as the cause of his ailment. The diagnosis was congestion of the liver, probably injury to, and temporary occlusion of, the common bile duct, and jaundice. He was put upon suitable treatment; and, on the 13th of October, he reported himself quite well. The tongue was quite clean; the bowels relieved twice a day; the skin less yellow. He ate a chop on the 12th for the first time. On the 14th he was discharged convalescent.

Nov. 2nd.—He was re-admitted, complaining that he was passing a quantity of blood in his motions. It appears that since leaving the hospital he has never felt perfectly well; but has had no pain in his bowels. On the 29th of Oct. he noticed a small quantity of blood in his stools, which has gradually increased. He was ordered an enema, containing the solution of acetate of lead.

3rd.—Yesterday he had seven motions, each composed for the most part of blood. Two were seen; one consisted almost entirely of florid blood; the other, more copious, consisted of equal parts of blood and slimy fæces. Within the last twelve hours he has had four motions, each composed of blood and slimy fæces. Is excessively weak and pallid, with continual pain in the liver, and a burning pain just below the umbilicus, increased on pressure. No gurgling in iliac fossa, nor pain there. Nothing abnormal can be detected in the rectum. He was ordered four grains of the acetate of lead every hour.—Evening: Still continues to pass slimy motions, mixed with blood, in about the same quantity. Ordered by Dr. Andrew, the resident medical officer, fifty minims of tincture of opium in two ounces of decoction of starch, to be given at once as an enema.

4th.—Two A.M.: Extreme rigors, weakness, and great prostration, commencing at midnight; slight wandering at times; pain at right of umbilicus, increased on pressure; pulse small and frequent. Several small, rose-coloured papulæ have appeared about the body.—Ten A.M.: Bowels not open since yesterday evening; countenance is extremely anxious; jactitation; occasional dozing; debility increased; decubitus dorsal; mouth dry; thirst.—Eleven P.M.: Sitting up in bed writing a letter in Latin, the room being dark. On being questioned, he replied incoherently; relapsed every now and then into violent sobbing, and complained of frontal pain, which seemed to be the cause of it; frequent desire to get out of bed. To have six leeches applied to the head.

5th.—Slept for two hours after the leeches, since then the same symptoms have supervened. Now there is carphology, with jactitation and partial incoherence. Slight tetanic spasm of arms once observed. Pulse 85, full and compressible; pain at umbilicus; abdomen distended and tender; no fresh spots observed, but some old ones have disappeared; tongue white and tremulous; bowels not opened since the 3rd.

7th.—Passed two solid motions, light, and slightly streaked with blood; eyes look much more yellow. Says he feels at times out of his mind. Ordered half a grain of morphia at bedtime, and half an ounce of castor oil next morning.

8th.—Did not sleep, but wandered during the night; bowels not open.

10th.—Complains of slight pain at the heart whenever he lies down upon his back; bowels opened twice from castor oil; motions loose, slightly tinged with blood; appetite pretty good; tongue slightly furred; feels much better; only suffers from debility.

He left the hospital a few days after, recovered from his present illness, although he was weak.

ROYAL SOCIETY.

ON THE SACCHARINE FUNCTION OF THE LIVER.

BY GEORGE HARLEY, M.D., F.C.S.,

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ALTHOUGH it is now nearly two hundred years since our countryman, the celebrated Dr. Thomas Willis, made the important discovery of the occasional presence of sugar in the human urine, it was not, until very recently, known that the formation of saccharine matter is constantly going on in the healthy animal body.

Since Bernard, in 1848, communicated to the French Academy the discovery of the saccharine function of the animal organism, physiologists in all countries have more or less directed to it their attention. For a time various opinions were held by different observers regarding the origin of the sugar found in the body; but at length it was generally admitted that the liver had the power of forming a substance to which Bernard gave the name *Glucogen*; that this peculiar substance was transformed into sugar; and that the sugar in its turn disappeared in the capillaries of the different organs and tissues of the body.

In the summer of 1858, however, Dr. Pavy read a paper on the "Alleged Sugar-forming Function of the Liver," before the Royal Society, the object of which was to prove that the presence of sugar in the animal economy is "due to a post-mortem occurrence;" that as long as life continues, glucogen only is to be found, and not until after death does the transformation of this substance into sugar begin.

The question of the saccharine function of the liver being a subject to which I have more or less directed my attention since 1853, when I communicated to the Société de Biologie de Paris