occur, even some hours after death. These do not appear to be the mere effect of relaxation of spasmodically contracted muscles, but rather resemble the jerking spasms produced by galvanism on an animal recently killed, and are probably intimately connected with the cause of warmth returning to the corpse, which in life had felt icy cold, and afford some reason to believe that the condition of the capillaries produced in life by cholera is not a mere cessation of vitality in them, as we have considered it; for the cold, where purging is scanty, exceeds that of any dead body, inasmuch as to suggest a question, whether the chemical or electrical actions in the capillaries which belong to health may not be not only impaired, but actually reversed in the disease, and heat absorbed instead of being evolved.

On opening the body after death, the appearances are exactly such as we should expect from the symptoms. The right side of the heart is found gorged and dilated, the dilatation and softness of the coats being greater as the case has been more protracted. The superior and inferior cavæ, and all their larger branches are loaded with dark, tarry, half-coagulated blood. The minute vessels of the lungs are empty, and the parenchyma often shrivelled and contracted, being pale on the surface, while the pulmonary artery is quite full of blood. The left side of the heart is contracted, and either empty or contains firm coagula, indicating a greater amount of life in the arterial than venous blood, which forms no solid coagulum; and the contraction of its auricle and ventricle a less amount of exhaustion of the muscular fibre in the left than on the right side of the heart, which is flabby and distended. The amount of congestion of the portal circulation, &c., is always considerable in the large vessels, but the smaller ones are more pale and bloodless in cases in which there has been much exudation. The gall-bladder generally contains bile. The spleen is commonly congested, but sometimes found empty, which is, probably, a *post-mortem* effect of its peculiarly elastic structure; when death takes place from consecutive fever, however, it is soft and friable, an almost invariable condition in death from malarious poisoning by tropical fever, &c. The intestines present a peculiar appearance, the colon much contracted and empty, the small intestines containing fluid similar to that passed in life, mixed with a denser material, probably the fibrin and albumen in peculiar chemical combination from which the more fluid part of the blood had been drained off, the sub-mucous coat is distended in different places with the same material, sometimes mixed with broken-down red globules. The kidney is nearly normal, and the bladder contracted; the brain seldom presents anything peculiar. These appearances require no comment beyond that which has preceded their description in relation to the symptoms.

It would appear, then, that congestion and oppression to the circulation is always the cause of death, and that congestion is a consequence of disordered capillary circulation. We have sufficiently discussed the modes, both natural and artificial, of relieving this congestion, but as yet we have left the means of removing its cause

in the capillary circulation altogether unconsidered, although it is perfectly evident that this must be the main object of medical treatment. The patient is cold, nothing can be more natural than to try to warm him, and the circulation being nearly at a stand, what is more natural than to rouse it with a stimulant? But then he is cold only to our sensations, not to his own; he is burning and suffocating, and cannot bear even clothing, much less external heat; he is craving for ice and cold water, and the hot stimulant draught which we force upon him is torture; he is vomiting, yet anxious to drink.

Are we then to treat him according to our sensations or to his?—to torture him, or indulge cravings that appear to us so opposite to what his condition requires?—or are we to disregard alike his sensations and our own impressions, and seek for the means of removing the cause of this anomalous condition?

These are questions of which we shall defer the consideration till our next meeting.

CASE OF FUNGOID DISEASE OF THE PANCREAS.

By GEORGE NORMAN, Esq., F.R.C.S., Senior Surgeon to the Bath United Hospital.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, September, 1848.)

A gentleman, aged 31, consulted me in the beginning of July, 1848, for an uneasy feeling after eating, and a degree of nausea, which he had experienced during the previous fortnight, having always before enjoyed good health. There was nothing to induce a belief that it was more than a temporary derangement of the stomach, but in a few days after, the tunica conjunctiva became yellow, and in less than a week he had complete jaundice. There was no enlargement or fulness about the region of the liver, nor any pain felt on pressure. An active purgative plan did not diminish the jaundice, and the evacuations exhibited a total absence of bile, and, excepting on two or three occasions, there was never afterwards any evidence of the bile getting into the alimentary canal.

On the 1st of August, I again made a careful examination of the abdomen; there was still no evidence of disease of the liver, but by pressing very hard on the region of the stomach, I could feel an oblong tumour, crossing the spine, hard, deep-seated, immovable, and not painful on pressure; its situation was that of the pancreas, but it was difficult to believe that that organ could be felt in a person not emaciated.

He was put on a course of mercury, and his bowels kept relaxed by taraxacum. During the whole of this time he never complained of pain; his appetite was good, and his nights very tolerable. The mercury was continued till the gums became tender, but without any mitigation of the jaundice, and the tumour, when again examined, was found to have increased in size. On the 13th of August, Dr. Davies saw the case with me, and in examining the abdomen, a hardness and

fulness were found below the ribs in the right side, and it appeared to us that the liver was enlarged and extended some way below the rib. On the 16th, on examining, we found what appeared to us to be the edge of the liver, extended as low as the umbilicus, and that there was also enlargement and hardness in the situation of the left lobe of the liver. The day after this he was suddenly seized with violent pain in the left side, extending round to the back, which continued the whole night, and part of the next day, when it ceased, and was no more complained of. On the 19th he vomited his food, and from that time he scarcely kept anything on his stomach. On the 20th, Dr. Packman, of London, saw him with Dr. Davies and myself, and he considered with us, that there was great enlargement of the liver, but he thought there was also disease of the pylorus. On the 22nd the patient died.

The body was examined, and from four to five pints of fluid, deeply tinged with bile, were found in the abdomen. A large tumour was discovered stretching across the spine, extending under the ribs on the right side, and downwards, as low as the umbilicus. To this tumour the transverse arch of the colon adhered, the coats of which were indurated, and partook of the nature of the tumour. The pyloric portion of the stomach was pushed upwards out of its natural situation by the tumour, and the liver also was forced up higher into the chest than natural. The tumour was the pancreas greatly enlarged, and indurated in nodules of a true scirrhus character. Embedded in its substance was the termination, and a good portion of the common duct of the liver, quite impervious, from the point where it entered the tumour. The hepatic duct was so distended with dark-coloured bile, that it was more than an inch in diameter; the gall-bladder was also distended to its utmost with dark-coloured bile. Attached to the pancreas, and forming a considerable portion of the tumour, was a large mass of the soft broken-down substance denominated fungus hæmatodes, occupying principally the left hypochondrium. Some of the vessels in this substance had given way, for there was a large coagulum of blood behind the peritoneum, which had no doubt been the cause of the violent pain felt in the left side and in the back, three or four days before death, and the cause of the rapid exhaustion of strength. In the mesentery were masses of considerable size of soft medullary matter; the liver was harder and larger than natural, but otherwise exhibited no evidence of disease.

INTERNAL USE OF CHLOROFORM IN DIARRHŒA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I imagine the only means of arriving at anything like a satisfactory conclusion as to the effect of any new mode of treatment is by each recording his experience of it, that by an accumulation of facts we may be enabled to establish such practice. In the present instance I lay no claim whatever to originality as to the

mode of treatment, (as indeed the readers of your Journal will be aware, for it was in consequence of having seen two cases recorded in it, by Mr. Brady and Mr. Stedman, that induced me to try chloroform in the following case):—

I was requested to see an old woman, aged 78, who had been suffering from excessive diarrhœa and sickness for four days, and could keep down nothing but a little brandy. She had had a little cramp. As I was not able to see her immediately, I sent a powder containing calomel, opium, capsicum powder, and Pulv. Cinn. Co., which was rejected instantly. When I saw her two or three hours afterwards, I found her exhausted to the last degree, the bowels were acting every half hour, and the excretions of a frothy serous nature, with a perfect absence of bile, the sickness was incessant, the urine scanty and with a very copious deposit. In this state of things it was evident that unless the symptoms abated she could not last long, and I therefore resolved to try chloroform as a stimulant, and calomel upon the principle so ably advocated by Dr. Searle. I accordingly gave her ten minims of chloroform, with half a drachm of Tinct. Zinzib. and two drachms of Aq. Cinn., in a little brandy and water, at the same time putting on the tongue, a powder containing two grains of calomel, and three of compound tragacanth powder, which latter was repeated twice at intervals of two hours, and the chloroform draught again at bed-time. The diarrhœa and sickness both ceased after the first draught and powder. She passed a comfortable night and kept down some toast, &c. On the following morning I found her much better, the pulse firmer and a nice warmth of surface; there was no action on the bowels or sickness during the whole day. I gave her two more draughts of chloroform and two calomel powders in the course of the day; she had again a very comfortable night, had two natural and healthy motions on the following morning, and the urine was perfectly clear and sufficient in quantity. They omitted sending me a report on the following morning, as they were instructed to do, and consequently she had no medicine to take until the afternoon, when I saw her and found her much exhausted with a feeling of nausea. I ordered the chloroform draught to be repeated, which relieved her instantly, (or to use the expression of her nurse,) "seemed to put new life into her." She passed a very comfortable night, kept down everything she took, and the secretions were quite healthy and regular. She continues taking a mixture, containing small doses of chloroform, with Tinct. Cardamomi Co., and Tinctura Zinzib., and is now fast convalescing, and can take meat and porter in small quantities.

I should mention, that before I saw her, she had been taking, by the advice of a lady, laudanum in brandy, several times, but without the slightest effect, although it was retained on the stomach; I think, therefore, we may fairly attribute the abatement of the symptoms to the combined action of the chloroform and calomel. I can also state, that I have since tried the same remedies, under similar circumstances, with equally satisfactory results.

I remain Sir,

Yours faithfully,

S. GEORGE SLOMAN.

Farnham, November 18, 1848.