CASE OF COLLOID OR GELATINIFORM CANCER OF THE PERITONEUM AND COLON; WITH REMARKS.

By ROBERT HUNTER SEMPLE, M.D., and EDWARD BALLARD, M.D.

CASE. Mary Hall, aged 66, an inmate of the Islington Workhouse, moderately well-formed, rather thin and pale, but not remarkably so, presented herself for medical relief on the 23rd of April, 1851. She complained of pain in the bowels, with purging, and some vomiting. She did not represent her case as a serious one, and she was not in the infirmary. The disease was considered as a common disorder of the bowels; and she was accordingly ordered to take the following: $\mathcal{R}$ Tr. opii $\mathfrak{z}$ ss, mag. carb. $\mathfrak{z}$ ss, sulph. mag. $\mathfrak{z}$ ij, aq. menth. pip. $\mathfrak{z}$ vj. Sumat coch. ij magna 4tis horis.

April 25. The pain in the stomach and bowels was not relieved; the tongue was furred; the skin hot and dry; purging still continued; vomiting had ceased. She was ordered to take the following: $\mathcal{R}$ Hydr. c. cretâ, pulv. ipecac. co., $\mathfrak{ss}$ gr. iij. Fiat pulvis 4tis horis sumendus. She improved slightly under this treatment; but, as she did not lose all the symptoms, she was ordered into the infirmary, in order that she might be seen and examined in bed.

April 28. She was now lying in bed, undressed, and the state of the abdomen was carefully examined. It was generally soft and yielding, and resonant; but, owing to the pain experienced in the manipulation, the abdominal muscles were put upon the stretch, which considerably obscured the physical symptoms. It was very evident, however, that a dulness existed below the stomach, and there was a feeling of an irregular, soft, tumefied mass in that situation. The palpation of this tumid part caused great pain, and the pain was not at all relieved, but, on the contrary, was very much increased by pressure, especially by firm pressure. There was want of appetite, furred tongue, dry and hot skin, thirst, and diarrhœa; the stools were fluid and frothy, but not fœculent; the pulse was rapid and rather full. Under these circumstances, Dr. Semple considered that, whatever the disease might ultimately prove to be, there was, at the period now described, a local inflammation of the colon, and that, although there was diarrhœa, there was nevertheless abundance of fœcal matter impacted in the intestine, which might probably be the cause of the present mischief. This opinion was founded upon the circumstance, that Dr. Semple had often observed in old persons who neglected the state of their bowels, that great fœcal accumulations often led to inflammatory conditions of the intestinal canal, and that, although in such cases diarrhœa often existed, it should not be allowed to mislead the practitioner, and to induce him to trust to astringent remedies. There was at this period no emaciation, nor any other appearance to lead to the suspicion of organic disease. She was therefore directed to remain in bed, to take liquids for her food, and to *apply eight leeches over the situation of the supposed tumour*. She was also directed to apply warm poultices after the leeches were removed.

April 30. She was decidedly relieved by the application of the leeches, which had bled well; but there was still a great degree of tenderness on

pressure, and the diarrhœa continued. The muscles of the abdomen being now less contracted, there was felt a distinct tumefaction over the course of the colon. Under the impression that there was inflammatory disease, and that, notwithstanding the diarrhœa, there was still an accumulation of fœculent matter in the intestines, the following plan was recommended. Six more leeches were directed to be applied over the region of the colon, and the leech-bites fomented as before. The following medicines were also ordered: $\mathcal{R}$ Hydrargyri chloridi gr. ij, opii gr. $\frac{1}{3}$. Ft. pilula 6tis horis sumenda. $\mathcal{R}$ Tincturæ catechu 3ij, aquæ menth. pip. 3vj. Sumat cochlearia ij magna 4tis horis.

May 2. She was decidedly better: the tenderness on pressure was very much relieved; the diarrhœa was less frequent. She was directed to continue the medicines.

May 3. Her bowels had now become confined, and she was accordingly ordered to discontinue the former medicines, and to take an ounce of castor oil.

May 4. She now reported that she was very much better; the tenderness had almost disappeared; her tongue was cleaning. She stated, that during the night she had been to the water-closet and had passed, with great difficulty, some hard lumps like stones, but which unfortunately she had not preserved, and that the evacuation of these masses was attended with immediate relief. Dr. Semple therefore considered, that his conjecture as to the existence of hard fœculent masses in the intestine had been correctly formed; and he therefore, in order to evacuate any remaining portions of such matter, directed her to take an ounce of the common purging mixture, consisting of salts and senna, every four hours. (It will be seen, by reference to the *post-mortem* examination, that there was a large quantity of fœcal matter found in the intestines after death.)

May 8. The patient was still improving, and expressed herself better in all respects; she slept well at night, and had very little pain in the abdomen. She complained, however, of flatulence, acidity of the stomach, and want of appetite, and she was accordingly ordered the following: $\mathcal{R}$ Liq. potassæ 3ij, essentiæ menth. pip. 3ss, infus. gentianæ 3vj. Ft. mist., cujus sumat coch. ij magna 4tis horis.

May 9. She now complained of some feverish symptoms, as hot, dry skin, furred tongue, and thirst, and she was accordingly ordered to take the following febrifuge mixture. $\mathcal{R}$ Antimon. potassio-tart. gr. j, sp. æth. nitrici 3ij, liq. amm. acet., et mist. camph., aa 3iij. M. Ft. mist., cujus sumat coch. ij magna 4tis horis. This medicine allayed the feverish symptoms.

She now became so much better that she was able to leave her bed, and, at her own request, was allowed a mutton chop daily, with half a pint of porter, which she duly consumed; and the only medicine she took was an occasional dose of infusion of gentian, which she found to strengthen her. After the lapse of about a month, however, she again began to complain of pain in the abdomen, of sleepless nights, and of a deficiency of appetite. She was often examined carefully, and the tumefaction over the region of the colon was distinctly recognised; the tumour, however, was soft and quite moveable, and there was no nodulation apparent in any part. At this time, Dr. Semple suspected the existence of organic disease, and expressed an opinion

that the nature of the case was one of the soft forms of cancer, and, indeed, he considered it to be a tumour of medullary sarcoma. Under this impression, she was ordered to take small doses occasionally of tincture of henbane in peppermint water.

June 17. The pain was not diminished by the use of the henbane; she had sleepless nights; and her appetite, although not lost, had become capricious, and she was allowed, at her own request, to have sometimes fish, and sometimes eggs, in place of the mutton chop. In order to allay the pain, of which she continually complained, she was ordered to take twenty minims of tincture of opium every four hours in peppermint water. This produced some alleviation of the pain, and she accordingly took it every day for a considerable time. The case was now regarded as hopeless, and the symptoms of organic disease became quite apparent; the features became shrunk, there was excessive emaciation, and total loss of appetite; the pulse was rapid, and very feeble; she retained her consciousness throughout, and wished for death to release her from her sufferings. She never had any faecal vomiting, nor was she latterly troubled with vomiting at all. She was ordered to take the opiate occasionally. She gradually sank, and died on the 29th of July.

POST-MORTEM EXAMINATION OF THE BODY, made on the 30th of July by Dr. Ballard and Dr. Semple.

Conformation. Spare; muscles pale; scarcely any subcutaneous fat.

Head. Brain quite healthy.

Chest. Pleuræ both healthy; no adhesion; lungs slightly emphysematous; a little puckering with cretaceous matter at the apex of each; heart small.

Abdomen. The tumour perceived during life was evident on handling the abdomen; it was firm, and slightly moveable, emitting a dull sound on percussion, bordered by resonance of the intestines below, and of the stomach between it and the hepatic dulness above. It extended across the abdomen, in the direction of the transverse colon, an inch below the umbilicus; and, on opening the abdomen, the parietes were found strongly adherent to it, in the middle line, over a circular extent of about two and a half inches diameter. The situation of the parts then displayed was as follows: The tumour, which turned out to be in the transverse colon, lay across the abdomen, at the level mentioned; and the stomach, which was of full size, occupied, with the liver, its natural position, a part of it lying between the tumour and the edge of the liver. The cæcum and ascending colon were not found in their usual position, but placed in a line with the transverse colon; the cæcum occupying a position in the right flank, and the extremity of the ileum crossing the iliac fossa to enter it. The small intestines were tolerably filled with flatus. The sigmoid flexure was lying altogether within the pelvis; and, with the rectum, was filled with solid fæces. With the exception of the serous covering of the liver, spleen, and stomach, every part of the peritoneum, parietal and visceral, together with its folds, was studded with minute granular elevations, which rendered the surface rough to the finger passed over it. Each granule was surrounded by a little zone of redness. At first sight, they were taken for miliary tubercles; but, on the nature of the tumour being discovered, they were subjected to closer examin-

ation, and found to consist each of a little bit of gelatinous matter, enclosed in the substance of the serous membrane: in no case were the grains found to be bilocular. There were but few on the diaphragmatic peritoneum, and at the upper part of the abdomen; but were more abundant, and placed closer, over all those parts which lay below and towards the pelvis: here, too, some were larger, and nearly of the size of small peas. The tumour consisted of the transverse arch of the colon, which was adherent above to a part of the great curvature of the stomach, and below to a part of the jejunum; and it presented externally a purple discoloured appearance. On handling it, part of its substance gave way, and a portion of the contents passed into the peritoneal cavity. The cæcum was filled with liquid fæces. On passing the finger from it into the tumefied transverse colon, the canal was found so contracted as scarcely to admit it for about six inches. It was laid open throughout, and the nature of the disease then became evident. Throughout the contracted portion, the internal surface was raised into large rugose elevations of irregular shape, but most of them with their long diameter placed transversely. The wall of the intestine was thickened to the extent of from one-eighth to half an inch. The whole rugæ and intestinal wall were filled with locular colloid cancer, which had evidently first infiltrated the mucous membrane, and then passed through the muscular coat to the serous, which in some parts it had infiltrated also; in other parts, this membrane passed unaltered over the colloid matter. Near the commencement of the descending colon, there were small isolated elevations, of the size of a pea and larger, on the mucous surface, each consisting of gelatiniform matter contained in loculi. The cell in many parts opened upon the free surface of the membrane, which here exhibited, when examined in water, a reticulated appearance. At the adherent part, the mucous membrane of the stomach presented some purple discolouration; and, on floating out the mass of disease in water, several foramina were observed, by which a probe could be passed from the stomach into the contracted part of the colon. The rest of the stomach was healthy. The liver presented the appearance known as biliary congestion: the gall-bladder contained thirty largish angular gall-stones, two of them firmly impacted in its duct. The spleen was natural. The left kidney was small, with a lobulated exterior, and felt soft and fluctuating. On section, it was found universally hollowed out into cysts, as large as a hazel nut, most of them containing a clear serous fluid; none of the natural tissues of the organ remained. The right kidney was nearly twice its natural size, and at its lower extremity presented three or four cysts, similar to those in the left; but the whole upper two-thirds was hypertrophied, soft, and watery. The ovaries were small and hard. The uterus was small, but healthy. The bladder was healthy.

REMARKS. The rarity of the occurrence of colloid as compared with that of scirrhus and the encephaloid forms of cancer, and the little frequency with which cancer of the large intestine (except of the rectum, perhaps) is met with at all, give an interest to this case. Judging from the appearance of that part of the colon where the disease was in an incipient state, the infiltration commenced in the mucous membrane, and extended from this through the thickness of the wall of the intes-

tine. Along with the progress of the infiltration, a process of shortening of the canal appears to have gone on, which, as the shortening portion was fixed by adhesion, resulted in the traction from their natural position of the cæcum and ascending colon. In a case of gelatiniform cancer of the peritoneum, published by Dr. Ballard in the *Medico-Chirurgical Transactions*, the advanced result of this affection, when occurring in the serous membrane, was exhibited. The present case is of interest in connexion with that, as shewing how the disease may commence in single loculi, scattered like tubercles on the surface of the membrane. Had this patient lived, no doubt more of these granules would have become developed; they would have formed an uniform layer over the membrane, new loculi would have become developed about them, and complete infiltration, with thickening of the membrane, would, as in that case, have been the result. In this instance, the disease of the serous membrane, though plainly consecutive to that of the colon, evidently arose independently of it, and, from its appearance in so many different foci, could only be supposed to have occurred from general contamination of the nutritive system with the sort of cancerous diathesis. It may be observed further, in connexion with the case, that it occurred, as colloid cancer mostly does, in a female.

The history of the case, as recorded by Dr. Semple, though pointing to the large intestine, and especially to its transverse arch as the locality of the disease, by no means indicates its nature. Indeed, apart from a consideration of the general symptoms, we do not see how even its seat could have been discovered with any accuracy, by the amount of physical exploration employed.

There are three other points to which we desire to direct attention. One of these is the absence of any fæcal vomiting, as symptomatic of the communications between the stomach and the colon, and the absence of fæcal matter at all in the former after death. The fact was, that the communications were by foramina, which appeared to have been formed by the breaking down of cancerous loculi, which had reached through the adherent organs; and not only were the communications blocked up by gelatinous matter, but they were probably closed also by pressure of the cancerous developments bounding them. Another remark we have to make, is on the absence of the cancerous aspect so commonly observed in the cachexia which accompanies the occurrence of other forms of cancer. The same absence of sallowness was observed in the case before referred to, and would appear to place some more marked distinction than is at present recognised between colloid cancer and the other forms of the disease. Our third remark is in connexion with the fact, that colloid cancer does not kill the patient, as scirrhus and encephaloid often do, by a general effect on the blood and nutrition of the body, but may go on increasing and extending its ravages far and wide, in the part that it attacks; the patient meanwhile only suffering from the encroachment it makes upon the functions of parts, whose healthy action is more or less necessary to life. This is illustrated in the case before us. The immediate cause of death was the contracted state of the large intestine, and would have taken place in the same manner, had the cause of the contraction been inflammatory or hypertrophous, in place of being cancerous. In Dr. Ballard's case, again, no constitutional symptoms of cancer

were present, the symptoms which the patient presented being due to the pressure of the new formation upon the organs of the chest and abdomen; and the patient died as if she had been worn out with ascites, ovarian tumour, or any other disease acting in a similar manner.

CLINICAL ILLUSTRATIONS OF DISEASES OF THE NERVOUS SYSTEM.

By ROBERT HUNTER SEMPLE, M.D.

CASE OF ACUTE SUICIDAL MANIA TERMINATING FATALLY.

CASE. Henry Staples, aged 23, a boot-closer, of average size and conformation; thin, spare, rather tall; rather good-looking than otherwise.

PREVIOUS HISTORY. His father had been twice insane; the first time, was upwards of twenty years ago, when he was very gloomy, melancholy, and desponding; and, according to the account which I received from his eldest son, he was in a state of insanity when the subject of the present case was conceived. About ten years ago, the father made an attempt upon his life by cutting his throat, and was accordingly taken to St. Bartholomew's Hospital, where he was kept closely watched and under restraint, and where he eventually recovered; and was now (July 1851) in a sufficiently sane state to manage his affairs. I was informed that the subject of the present case had been well brought up, and had been educated as well as, or rather better than persons in his rank of life usually are; he was by no means ignorant. His brother stated that, from his earliest youth he had exhibited symptoms of moroseness of disposition and sulkiness; but that he now attributed these peculiarities to the influence of hereditary mental disease. He was reported to have been always a very steady young man, attentive to his work, esteemed by his employers, and not at all addicted to drink, or to sexual indulgence.¹

On Friday, July 4, 1851, an alteration was observed in his manner; he complained of unusual lowness of spirits, and began crying like a child; he had also pains in his limbs, and general uneasiness. On Sunday morning he rose from bed, and talked in a wild and incoherent manner; he also began dancing and capering about the room. Three of his acquaintances came in to see him, and proposed an excursion to Epping Forest to raise his spirits and to amuse him. It appears that they took him with them, and gave him some cold brandy and water, together with ale and ginger-beer. It does not appear that they drank much; but, when the subject of the case came home, he was furiously delirious. In consequence, a medical man was sent for, who administered some medicine, and told the relatives that he would pass some

¹ His brother has told me, that he used to have frequent conversations with him, and that he often complained of lowness of spirits; that, from reading some medical book, he had come to the conclusion that he had injured himself by extreme continence; and that he was continually in dread of alienation of mind.