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PERMANENT OCCLUSION OF THE COMMON GALL-DUCT—CHRONIC
HEPATITIS—DEATH—AUTOPSY.

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A. C., æt. 50, manufacturing chemist, born in Scotland, of bilious-sanguine temperament, so called, naturally strong constitution, stout but not corpulent, temperate though not abstemious in his habits; height, 5 feet 10½ inches; average weight, 185 pounds. In April, 1863, he became my patient for dyspeptic symptoms, which had attacked him rather suddenly. His health for many years had been perfectly good, and with the exception of an acute bronchial affection, for which he kept the house for a fortnight during the autumn of 1862, and a lameness in right chest, induced by a fall from his carriage and disappearing in a few days, his previous history presented nothing remarkable. A careful exploration of the chest revealed no disease of the thoracic viscera. The symptoms were—pyrosis, cardialgia and deficient appetite, with furred tongue, costive bowels and acid eructations. Simple treatment was advised, namely, a regulated diet, a few grains of blue pill followed by Rochelle powder, and subsequently bismuth, soda and the simple bitters. He had been accustomed to take a glass of mild ale with dinner, and once a week to dine with Scotch friends and to indulge in a genial glass of the smoky-flavored whiskey for which his native land is famed. From these indulgences he was enjoined to desist. A few weeks later, his condition having improved, though the dyspeptic symptoms had not wholly disappeared, he was advised to try a change of air, in the belief that a journey, with relaxation from business cares, would fully restore his health. Accordingly, he passed nearly two months in the State of Maine.

On his return, I was disappointed in finding him worse than when he left home, notwithstanding he had paid strict attention to diet, regimen, &c., and abstained from stimulants. A few days afterwards, jaundice appeared unexpectedly, without aggravation of his previ-

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ous symptoms. The epigastrium was found somewhat tender on pressure, but a careful examination of the hepatic region, covered as it was by more than two inches of adipose tissue, failed to detect either enlargement of the liver or a distended gall-bladder. There was no complaint of pain, and the epigastric tenderness above mentioned was so slight as to have escaped the patient's notice. Disrelish for food, languor, inaptitude for mental or bodily exertion, a sense of weariness in the limbs, and irritability of temper, unusual in a man of easy disposition and especially annoying to himself, were the principal subjective symptoms. The pulse was full and slow, ranging between 54 and 60. The bowels were usually confined, and when open the stools were clay-colored, loose and frequent. The conjunctivæ, skin and urine presented the appearance usual in jaundice, but the obstinate character of the precursory dyspeptic symptoms rendered the case peculiar. Gentle saline purgatives, diaphoretics, baths, rest and regulated diet were for a fortnight tried without avail. Then, according to the plan recommended by Dr. James Jackson, eight leeches were placed over the point where the common duct opens into the duodenum. The leeches were followed by a large blister, but no relief was experienced.

At my request, the patient was now seen by Dr. John Ware, who thought that he could discover at the spot where the leeches had been applied a circumscribed, deep-seated induration, the result either of inflammatory action or incipient malignant disease, probably the latter. He suggested that the patient should be gradually brought under the influence of mercury, and so kept for some time. Gentle ptyalism was induced in about two weeks by the daily administration of calomel (gr. ss.) and ext. conii maculati (gr. v.), taken in pill at bed-time. As soon as the gums became tender and the characteristic odor of the breath was perceived, the medicine was discontinued for a few days, and then resumed in the dose of one pill every alternate night. This course, which was commenced in November, 1863, was pursued till the close of February, 1864, when, the jaundice having perceptibly abated, and the stools having become more natural, the external and internal use of nitro-muriatic acid was substituted for the mercurial treatment.

Early in March, A. C., at my suggestion, took passage for Scotland, in the hope that travelling for several months would completely restore his health, already apparently much improved. To obviate constipation during the voyage, he was directed to take a wineglass of sea-water three times a day. I advised that on his arrival in Scotland he place himself under the best medical care. He took with him a full description of his case, with the treatment pursued, and was warned on no account to submit to a second course of mercury, both Dr. Ware and myself agreeing that no farther benefit could be expected from that drug. On reaching Glasgow, A. C. became the patient of an eminent physician of that city, who then filled

the chair of Pathology in its Medical University. Soon after, I received a letter from him, stating that his disease was vaguely diagnosed as "liver complaint." The letter enclosed the prescriptions of his medical attendant, in which hydrargyrum cum cretâ and quinine predominated. Against this treatment I sent a written remonstrance, which induced A. C. to leave off mercury.

He reached home early in August, and again placed himself under my care. I learned that, during both passages, he had suffered from seasickness, and had vomited freely, but that the matters thrown off had "never once tasted bitter nor looked like bile." He had repeatedly examined his stools and found them clay-colored, except when tinged by some article of diet. His complexion was still jaundiced, although his appetite was good, and he had gained considerably in weight. The pulse was slow, the alvine dejections clay-colored, the urine loaded with bile, and the skin, especially of the face, the seat of a lichenoid eruption, attended with intolerable itching, which deprived him of sleep. The whole category of anodynes were tried in succession, and abandoned, either because they disagreed or failed to allay the pruritus.

During September, patient emaciated rapidly, and enlargement of the liver began to take place. At first, the lower border of the right lobe could be distinguished just below the ribs, and in less than a fortnight the hepatic tumor had descended to the level of the umbilicus, and reached, superiorly, the lower border of the fourth rib, as was evident by percussion. The enlargement of the liver was accompanied by pain and tenderness on pressure, which were relieved by leeching, hot fomentations and external application of iodine. Through the abdominal parietes, the hepatic swelling felt smooth, uniform, firm but not hard, the lower border well defined and tolerably sharp; as yet there was no marked enlargement of the left lobe; a slight, though distinct, fluctuation showed the presence of effusion to a moderate degree, but too inconsiderable to constitute ascites. The pruritus daily grew more troublesome, and, with the failing strength of the patient, caused his principal annoyance. This symptom was partially relieved by bathing the affected parts with chloric ether, but a more effectual remedy was afforded by destroying with the nails the papules of lichen as fast as they appeared. Abscesses of an indolent character, occupying the pinnae of the ears and portions of the face, now began to form in quick succession, and, on discharging, voided pus deeply tinged with bile.

Dr. Ware having deceased, at the suggestion of the patient Dr. M. Wyman was seen in consultation, Sept. 26th, 1864. After repeated examinations, Dr. W. diagnosticated probable cancer of the liver, and proposed a course of iodide of iron in the form of Blanchard's pills. At Dr. W.'s request, the diagnosis of cancer was communicated to the patient and his family. This view of the case was objected to by them, partly from reluctance to admit the existence of

malignant disease, partly because such a diagnosis was at variance with the opinion which they had previously elicited from me, namely, that the primary lesion was of an inflammatory character and had produced closure of the common duct, and that the disease of the liver was a secondary affection, caused by the prolonged disturbance to the functions of the organ in consequence of the obstruction.

One year and a half had now elapsed since the initiatory dyspepsia, and a year since the supervention of jaundice. The disease was therefore clearly removed from the category of acute affections, and must be classed among the chronic diseases of the liver attended with jaundice and progressive enlargement of the organ, but without ascites. The principal chronic diseases of the liver attended with enlargement are—1, simple hypertrophy; 2, chronic congestion; 3, chronic hepatitis; 4, abscess of the liver; 5, fatty liver; 6, waxy do.; 7, syphilitic do.; 8, cancer of the liver; 9, hydatids.

These diseases are usually attended with little or no jaundice, and in this particular differ materially from the present case, during which jaundice had persisted in an aggravated form. Little difficulty was experienced in excluding from the question of the diagnosis all the above disorders, except cancer and chronic hepatitis. The case presented symptoms common to both, but was complicated with a more marked degree of jaundice than usually attends either.

On the one hand, militating against the diagnosis of cancer were, the perfectly smooth outlines of the hepatic tumor, the absence of nodules of various sizes developed in its substance, and of swollen jugular glands, on whose existence Virchow lays stress as a mark of distinction between the cancerous and the non-malignant enlargements of the liver.

On the other hand, chronic inflammation of the liver is almost unknown, except in hot climates; moreover, the fact that extreme latitude has been given to the term chronic hepatitis, and that the pathognomonic symptoms, if any exist, of the disease properly so called, have not yet been determined, added to the obscurity of the case, and rendered an exact diagnosis difficult, if not impossible.

Restricting the application of the term chronic hepatitis to that state in which the liver is "augmented in size, harder than natural yet easily torn, of deep red color, and in which the exudation is very apt to become purulent, we have these manifestations:—dull, heavy pain in the hepatic region, somewhat augmented by pressure; dry, heated skin, of sallow hue, and often the seat of distressing itching, a yellowish conjunctiva, indigestion, whitish stools generally hard, a short cough and the physical signs on palpation and percussion of an enlarged liver, the border of which is uniformly thickened and hardened."

There could scarcely be given a more graphic description of the condition of my patient, after his case became confirmed. It will be shown how nearly the *post-mortem* appearances coincided with those of chronic inflammation of the liver, as above stated.

In October, 1864, I accompanied my patient to New York city for the purpose of obtaining Prof. Alonzo Clark's opinion of the nature of the difficulty. Prof. C., together with Prof. Willard Parker, saw the case several times, and both expressed the conviction that the disease was *not* cancer of the liver, but chronic inflammation produced by permanent occlusion of the common duct, the cause of which was involved in obscurity, though probably inflammatory. They gave an unfavorable prognosis, and confessed themselves unable to make any suggestion as to the treatment other than to persevere in the use of the iodide of iron.

A few weeks after his return home, A. C., discouraged by the unfavorable aspect of the case, resolved to try the virtues of homœopathy, and accordingly placed himself under the care of a disciple of Hahnemann, by whom he was treated with full doses of mandrake, and vigorous counter-irritation over the region of the liver with croton oil, a mode of treatment not recommended, so far as I can find, in the "*Novum Organon*." Unfortunately, he did not reap the benefit which he anticipated, and, early in the spring of 1865, again placed himself under the care of a regular practitioner—Dr. S., of Clinton, Mass. His new adviser diagnosticated obstruction of the common duct by gall-stones or inspissated bile, and with the purpose of expelling the impacted substance, sought to excite an extraordinary flow of bile by the use of sulphate of manganese, which is regarded by some authorities as a powerful cholagogue. After this remedy had been taken for several weeks in small doses, as a tonic and alterative, an attempt was made to act energetically upon the liver by very large ones. Half an ounce of the drug was given every twenty-four hours, in divided doses of a drachm each, resulting in moderate action of the bowels, great prostration of strength, severe pain in the region of the liver, and a remarkable deepening of the jaundiced color of the skin and conjunctivæ. This was attributed by the physician to the increased secretion of bile produced by the medicine and absorbed into the circulation. The manganese was followed by a brisk cathartic. The stools having been brought to me to be tested for the presence of bile, only the faintest trace could be detected, derived undoubtedly from the intestinal secretions. The same course was repeated four times, at intervals of a week, affecting the patient more severely each time, but no bile appeared in the stools. After the fourth trial, which brought on double pneumonia, the patient growing skeptical as to the existence of impacted gall-stones in his common duct, again sent for me.

I found the lower lobe of the right lung, and two-thirds of the left lung hepatized. A day or two later, he was visited by Dr. Wyman, who now judged, from its long continuance, that the disease could not be cancer, as he had once believed. The treatment consisted in supporting the patient's strength with beef-tea and wine whey. The pneumonia gradually disappeared, so that in the pleasant wea-

ther of June, although very feeble, and having lost more than fifty pounds' weight, he was able to ride out.

Near the middle of July, he went to the sea-shore. Soon after, hæmorrhage from the gums and eyelids indicated that his protracted sufferings would soon close. About this time, a roundish, elastic and prominent swelling, of the size of a small apple, having an indistinct fluctuation, and attended by severe pain and inability to use the left arm, appeared just below the spine of the left scapula. It was evident that deep-seated hæmorrhage had taken place. The patient's aversion to anodynes being so great that he preferred to suffer rather than take them, it was found impossible to relieve his distress. On the morning of August 10th, he partook of a light breakfast with some relish. Afterwards, his mind, which up to this time had been perfectly clear, failed, and he gradually sank into a state of profound coma, which continued until he died, at 1½ o'clock, A.M., August 11th.

At 3 o'clock, P.M., an autopsy was made, of which the following is the record:—Body much emaciated, complexion pale lemon-yellow; *rigor mortis* scarcely marked. Opening the post-scapular swelling, it was found to contain four ounces of coagulated blood and a like quantity of serum. On making the usual incision over the thoracic and abdominal viscera, several small collections of coagulated blood and serum were exposed. Thoracic contents healthy, except the heart, which was in a state of fatty degeneration, and quite empty. The abdomen contained nine ounces of serous fluid, somewhat deeply tinged with bile. Liver much enlarged, especially the right lobe, weighing nine pounds; color pale reddish-yellow, the entire organ being in a state of chronic inflammation, portions of it on the point of breaking down into pus; gall-bladder rather larger than natural, containing half an ounce of thin, yellow fluid; gall-ducts healthy and pervious, except just at the point where the common duct opens into the duodenum, where it was surrounded and compressed by an indurated mass the size of an English walnut, of somewhat irregular surface, pale-yellow color, firm consistence, slightly elastic. This was at once recognized as the result of circumscribed inflammation of the serous membrane, which was otherwise healthy. It was with some effort that a probe could be made to pass from the common duct into the duodenum, and there could be no doubt that the former had been impermeable to the passage of bile for a long time. Specimens of different sections of the liver were sent to Dr. Benj. S. Shaw, of Boston, who submitted them to microscopical examination, and confirmed the account given above. Pancreas of normal size, but softened almost to disintegration. Kidneys pale, but otherwise healthy. Spleen enlarged and softened, weighing two (2) pounds. On removing the calvaria and dura mater, the cavity of the arachnoid was found filled with coagulated blood and serum, eight (8) ounces each, spread uniformly over the

entire surface of the brain, which was otherwise healthy, though "moist."

From the history of this case, a valuable lesson may be drawn with reference to the amount of useless and sometimes positively injurious medication to which persons laboring under incurable chronic diseases are often subjected.

I would remark that the patient's urine was tested on several occasions, by the addition of sugar and sulphuric acid, to determine the presence or absence of the biliary acids, and that the reaction characteristic of the presence of these acids was obtained in every instance. As it is claimed that in jaundice this result may be taken as a sure indication that the jaundice is due to obstructed bile-ducts, the above fact is interesting.

SURGICAL CASES FROM THE RECORDS OF THE BOSTON DISPENSARY. SERVICE OF DR. CHEEVER.

Reported for the Boston Medical and Surgical Journal by F. G. MORRILL and R. C. GREENLEAF, Jr.

CASE I.—B. H., aged 3 weeks, was brought to the Surgeon's room with swelling and tenderness in the right groin, presenting the symptoms and appearances of a strangulated hernia, the vomiting alone being wanting. There had been no passage from the bowels for two days, the abdomen was swollen and tympanitic, and the child evidently was in great distress.

Examined under ether, the tumor felt like intestine. Notwithstanding these symptoms, as no testes were felt in the scrotum, the child was taken home, a fomentation applied, and the mother requested to bring it the next day, if there was no change for the better. She appeared accordingly, the child's symptoms being still more marked, slight vomiting having appeared, and increased swelling and pain in the groin. The child was again etherized, and an incision made over the tumor. On careful dissection, no bowel was found, but simply the descending testis with the attached gubernaculum, mesorchium, &c. There was no obstruction above the testis, and a director could be passed into the abdominal cavity. The wound was closed, a water dressing applied, and castor oil prescribed. On the next day the child was again seen, having had good passages from the bowels and great decrease of the abdominal swelling and pain. From this time he rapidly recovered.

This case is interesting from its great similarity to a case of strangulated hernia, both in internal and external symptoms.

CASE II.—Out of six cases of fractured clavicle, the only one worth mentioning was that of an infant in whom the fracture was caused by the violence of a female accoucheur.

CASE III.—Out of six fractures of the forearm, one was the rather