

very marked; it contains numerous oval and elongate nuclei and fine fibres which now form a very open meshwork possibly due to oedematous distension. Leucocytes of varying type are present, both singly and in patches. The variable layer of non-necrosed tissue just beneath the capsule presents similar features, including engorgement and hæmorrhages. In the pyramidal tissue the epithelium of the straight tubules is less affected and still stains selectively. Casts are frequent. There is considerable engorgement and here also the interlobular connective tissue is increased in amount.

As to the liver the nuclei stain with hæmatoxylin, showing several large chromatin granules. The protoplasm is lumpy and granular, presenting the appearance of cloudy swelling. Staining with sudan iii. fails to demonstrate more than an occasional globule of fat, nor can free iron be found after treatment with dilute hydrochloric acid and potassium ferrocyanide. The capillary spaces within the lobules are dilated but are not engorged, containing an occasional red and white corpuscle. The intralobular veins are dilated but empty. In the portal canals there is slight increase in the connective tissue but within the lobules little inter-cellular fibrosis. The small branches of the hepatic artery have slightly thickened walls. No hæmorrhages and no marked pathological changes were thus observed in the liver.

Remarks.—The kidneys are macroscopically identical with those described by Rose Bradford in the *Journal of Pathology and Bacteriology* for 1898, although he does not mention the small hæmorrhages found in this case. Microscopically they differ in that in his case there was a widespread endarteritis without interstitial fibrosis, while here the opposite obtains. The thrombi in his description are also of different character. In this case the thrombi seem to me to indicate the possibility of some agglutinin, though why it should operate only in arteries in such a limited area is mysterious. The size and weight of the kidneys and the large amount of interstitial fibrosis point to some previous renal affection of the large pale type. The condition of the liver would appear to be due to a secondary toxic effect. The fibrosis might be due to syphilis, either congenital or acquired, but the histological evidence for or against is quite inconclusive.

Melbourne.

A CASE OF ACUTE HÆMORRHAGIC PANCREATITIS.

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THE following case seems to be sufficiently rare to be worthy of record. The patient, a married woman, aged 60 years, was admitted into the Ayr District Asylum on Nov. 3rd, 1898, suffering from chronic mania, although at the commencement of her illness 26 years ago her mental condition was one of melancholia. She had always enjoyed good bodily health, was the mother of five children, and was a stoutly built, robust, and well-nourished woman. There was no history of indigestion, colic, or jaundice and her family history was unimportant. Until Friday, Sept. 22nd, 1905, she was perfectly well physically and it was only on the evening of that day that her illness commenced. She was in her usual state of health on the Friday and had taken her food well, but in the evening she complained of feeling a little sick, on account of which she was sent to bed. About one and a half hours afterwards the feeling of nausea developed into actual vomiting, accompanied by great abdominal pain, and when seen at 10 P.M. her condition was as follows. She was in a state of great collapse and was evidently in great suffering. She was retching and vomiting profusely, the vomited matter soon becoming bilious in character. She complained of great abdominal pain but was not able to locate it to any special area of the abdomen. On one occasion she described the pain as somewhat "bearing in character and as if something was moving." Her temperature was 98° F.; her pulse, which was weak, rapid, and fluttering, numbered 120 beats to the minute. Her tongue was dry and furred and her breath was very foul. On palpation the abdomen was universally "tender" and percussion revealed some distension of the stomach and transverse colon.

The vomiting and retching continued at short intervals during the night, but the pain was somewhat alleviated by the application of hot fomentations to the abdomen. The patient's condition on the following morning was much the same except that she was weaker and was as well slightly jaundiced. The vomiting and retching—which resisted all treatment—continued throughout the day, whilst the pain in the abdomen remained much about the same. In the evening she was more collapsed, her pulse was 130, and her temperature, which in the morning was 98°, had now risen to 100°. Her tongue was dry and coated with a thick, dirty fur, her extremities were cold and her brow was covered with a cold "clammy" sweat. The distension of the stomach and colon was more marked; the liver was now distinctly palpable and extended well below the costal margin. Throughout the Sunday the patient's condition presented little change. The pain became worse, necessitating the use of morphine, the retching and vomiting continued, she complained of great thirst, and she had now some diarrhoea. There was no marked change in the temperature but her pulse was almost imperceptible. She became gradually weaker, the pain and vomiting continued, and she died at 2.20 P.M. on Monday, in less than three days from the commencement of her illness.

Necropsy.—On Sept. 26th a post-mortem examination was made. The body was that of a well-nourished woman. Post-mortem lividity and rigidity were present. The thorax and abdomen were opened in the usual way and the viscera were exposed. The organs, *in situ*, showed marked distension of the stomach and transverse colon, the liver was somewhat enlarged, and there was marked fatty infiltration of the omentum. The heart was healthy, as also were the lungs, with the exception of a few old pleural adhesions at the right apex and slight congestion of the right lower lobe. On passing the hand into the abdomen a large firm mass was detected extending transversely across the abdomen, firmly adherent to all the surrounding structures, and in position occupying that of the pancreas. With difficulty the mass was separated from the surrounding structures and it weighed 11 ounces. The surface was dark-red in colour—in some places almost black—and on section only in parts could the true pancreatic tissue be recognised, the whole substance being much congested and in places showing areas of necrosis. The omentum and mesentery were abnormally fatty and on both were seen numerous white specks (the "fat necrosis" of Baker). The liver, which was adherent to the under surface of the diaphragm, weighed 51 ounces, and was enlarged, pale, soft, and fatty. The gall-bladder, the walls of which were thickened, contained a small quantity of bile, and as well four mulberry calculi, varying in size from that of a cherry to that of a pea. The spleen was congested and weighed six and a half ounces. The right kidney weighed ten ounces, the left seven ounces, and both organs showed well-marked cloudy swelling. With the exception of the distension of the stomach and transverse colon the gastrointestinal tract was normal.

Microscopical examination.—Owing to changes—necrotic or post-mortem—the sections prepared did not stain properly and the glandular tissue itself stained but faintly and diffusely. In various parts of the gland evidence was found of multiple, more or less recent, small hæmorrhages from the capillaries, all the vessels were engorged, and many of the larger vessels, both arteries and veins, showed signs of an acute inflammatory process. There was no general invasion of the tissues by micro-organisms but the larger pancreatic ducts were loaded with a bacillus probably the bacillus coli communis.

Comments.—As regards the etiology of the disease not much seems to be known. Osler in his "Text-book of Medicine," says: "Many of the patients are addicted to alcohol, others had suffered occasionally with severe pains and vomiting or with gall-stone colic."¹ The pathology of the disease is obscure. Some writers emphasise the association of this condition with gall-stones and certainly in the case above quoted stones were found in the gall-bladder. In Osler's "Textbook of Medicine" a case is related in which "a small calculus had lodged in the diverticulum of Vater, closing its duodenal orifice and converting the common bile-duct and the duct of Wirsung into a closed channel; bile, finding its way into the pancreas, had caused hæmorrhagic inflammation." Other writers again assert that bacterial infection has something to do with the immediate cause. In the case

¹ Osler: Text-book of Medicine.

related the larger ducts were loaded with a bacillus which might possibly have been the starting point of the mischief. Blocking of the pancreatic artery or one of its branches by an embolus, also an acute endarteritis followed by thrombosis, have also been suggested as possible explanations of the mischief.

The relation of fat necrosis to pancreatic disease is a recognised fact; small whitish areas may be found in the pancreatic tissue, in the mesentery, omentum, &c. In this case those white specks were abundant and easily recognised. "Flexner has produced acute hæmorrhagic pancreatitis by injecting artificial gastric juice into the duct of Wirsung. Opie has recently made the interesting observation that hæmorrhagic pancreatitis and fat necrosis may be produced by injecting bile into the pancreatic duct of dogs and has also shown that the penetration of bile into the pancreas may be the cause of these conditions in human cases."²

Symptoms.—From the very onset of her illness the patient was undoubtedly very ill, many of the symptoms pointing to some grave abdominal disease, either of the nature of an obstruction or an acute perforating peritonitis. It soon, however, became manifest that this was not so, whilst the hepatic enlargement, the character of the pain, &c., suggested the diagnosis of an acute hepatitis with gall-stone colic. No actual pancreatic swelling was present, owing probably to the enormous amount of fat in the abdominal wall and also to the amount of distension of the stomach and transverse colon.

With reference to the symptoms Professor Osler in his "Text-book of Medicine" says: "One of the most characteristic features is the suddenness of the onset, usually with violent colicky pain in the upper part of the abdomen. Nausea and vomiting follow with collapse symptoms, more or less severe according to the intensity of the attack. The abdomen becomes swollen and tense and there is constipation. The temperature at first may be low, subsequently fever sets in, sometimes initiated by a chill. Collapse symptoms supervene and death occurs usually from the second to the fourth day or even earlier."

The diagnosis seems to be extremely difficult, especially so at the commencement of the attack, many of the symptoms suggesting some acute abdominal mischief. "Acute pancreatitis is to be suspected when a previously healthy person, or a sufferer from occasional attacks of indigestion, is suddenly seized with a violent pain in the epigastrium followed by vomiting and collapse and in the course of 24 hours by a circumscribed epigastric swelling, tympanitic or resistant, with slight elevation of temperature. Circumscribed tenderness in the course of the pancreas and tender spots throughout the abdomen are valuable signs." (Fitz.)³

Treatment.—As regards this, with the exception of alleviating the pain there is not much that can be done, although surgical interference has in some cases proved successful. Mr. T. C. Litter Jones relates a case in which laparotomy was performed, the pancreas incised and packed with gauze, the patient ultimately making a complete recovery.⁴ For the persistent nausea and vomiting nothing seems to do any good. This, along with the severe suffering, makes, in the absence of surgical interference, the use of morphine quite indispensable.

I am indebted to Dr. C. C. Easterbrook for his kindness in allowing me to publish the case, to Dr. W. Ford Robertson for the preparation of microscopic specimens, and to Dr. D. Ashley Wilson who assisted with the post-mortem examination.

Ayr

A CASE OF VOLVULUS OF THE ASCENDING AND TRANSVERSE COLON, WITH UNUSUAL COMPLICATION.

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THE patient, who was a woman, aged 45 years, having gone to bed in her usual health, woke up at 3 A.M. on the morning of Dec. 9th, 1905, with very severe general abdominal pain and vomiting. The usual household remedies proving useless she sent for Dr. R. A. R. Lankester who saw her about noon and found her dressed and downstairs. She looked very ill, with drawn features,

and complained of agonising abdominal pain. On examination it was found that the abdomen was not distended and that it moved with respiration; it was generally tender and no localised swelling was made out. Dr. Lankester prescribed morphine and bismuth and about 5 P.M. his partner, Mr. R. Mercer, saw her and found all the symptoms worse and the abdomen becoming much distended. He gave a hypodermic injection of morphine and ordered an enema and saw her again at 8.30 P.M., when, finding that the enema had had no result, he sent her to the Bradford Infirmary. She had had no vomiting at all since 2 P.M.

I saw the patient at the infirmary about 10 P.M. Her pulse was thready and quite 140 per minute. She had the abdominal facies in a marked degree. She was a spare woman and her abdominal parietes were visibly stretched over an irregular swelling rather more marked to the right of the middle line and looking not unlike pregnancy in the seventh or eighth month. On palpation the swelling was very tense and on percussion but slightly tympanitic. On opening the abdomen below the umbilicus an intensely congested cystic swelling presented, the serous surface of which showed signs of splitting when an attempt was made to pass the hand into the abdomen. The swelling was packed round with gauze and incised; air and grumous viscid fluid escaped and as it emptied itself the viscus, which was later found to be the enormously dilated stomach, was pulled out. The gastro-hepatic omentum was purple with extravasated blood. The incision in the stomach was closed and the now obvious twist, from left to right, of the transverse and ascending colon was untwisted and the bowel involved, which was distended to a diameter of at least four inches, was incised, drained, and sutured as the stomach had been. In closing the abdomen the cæcum, which was normal, was sutured in the lower angle of the wound, where it could be opened later in case the distended bowel remained paralysed. The operation lasted in all 40 minutes. The patient had several liquid motions during the next 16 hours and took sips of hot water freely, but her pulse never improved and she died at 3 P.M. the following day.

The necropsy showed that there was no peritonitis. The stomach was dilated to four or five times the normal size; it contained much gas and some grumous fluid and also a few small whole white grapes. The large gut from a point a few inches above the cæcum to just short of the splenic flexure was very dilated and congested but had recovered considerably from the condition seen at the operation. No anatomical abnormality was observed.

Only one case of volvulus of the ascending colon is quoted in Treves's "Intestinal Obstruction" and I have been unable to find any recorded case similar to the above in which the involvement of the transverse colon led to dragging *viâ* the gastro colic omentum on the stomach. The gastro-hepatic omentum was so stretched as to cut off the blood-supply to the stomach, which then became rapidly and enormously dilated until it reached to within a couple of inches of the pubes. The operation relieved the strangulation of the colon and of its blood supply and there is every reason to think that the large bowel would have recovered itself. But the stomach was too severely damaged to recover and the patient died from acute gastric dilatation. It is interesting to note that after 2 P.M. (11 hours from the onset of the symptoms) there was no vomiting or even retching; at the hour named presumably the contractile power of the gastric muscle became completely paralysed. It might be a question whether the whole grapes found post mortem in the stomach had any etiological connexion with the condition.

Bradford.

THE TREASURER OF ST. THOMAS'S HOSPITAL: PRESENTATION OF A PORTRAIT.—On Jan. 16th, in the Governors' Hall of St. Thomas's Hospital, the portrait of Mr. J. G. Wainwright, J.P. (painted for members of the governing body and the staff by Mr. J. H. Bacon, A.R.A.), was presented by the Right Hon. the Lord Mayor of London and received on behalf of the hospital by Mr. A. P. Boysen, senior almoner of the hospital. Dr. S. J. Sharkey, senior physician to the hospital, presented a replica of the portrait to Mrs. Wainwright. In unveiling the portrait the Lord Mayor said that Mr. Wainwright had been a governor of the hospital for 40 years and during that time he had done admirable work for the institution. In 1890 he was appointed treasurer and as such he was the right man in the right place. He expressed the hope that Mr. Wainwright might be spared for many years to come to carry on his work.

² Ibid.

³ Ibid.

⁴ THE LANCET, Feb. 18th, 1905, p. 412.