

irregularly shaped cavity was reached towards the centre of the mass. Great care was taken not to allow the exploring finger to press through into the peritoneal cavity. A piece was removed which Dr. Mollison said showed undoubted signs of syphilitic inflammation. The tumour now disappeared rapidly and the man is apparently as strong and well as ever. He attributed the origin of the tumour to a strain in lifting. Here the diagnosis was very difficult for a long time and was hardly less so even when the inflammatory infiltration of the skin had occurred. Here the tumour was too big and extended too deeply into the pelvis for any sort of removal of the whole mass, but another operative error could easily have been made—viz., making a large incision in order to explore the growth, thus damaging permanently the abdominal wall. In this case appropriate medicine alone would not cause the disappearance of the tumour; it required the stimulus of the knife as well as drugs to influence its absorption.

CASE 4.—The patient was a man, aged 32 years, who during recovery from pneumonia discovered in his anterior abdominal wall below the umbilicus on the right side a steadily growing firm tumour with defined edges. There was a history of injury with a doubtful history of syphilitic infection. The patient was sent to me to be operated upon for sarcoma. Incision into the tumour and proper medicine caused its rapid disappearance, although it was quite three inches long. The microscopical appearance of a small slice removed was that of syphilitic inflammation. Here the comparatively small size of the growth, its well-marked definition from surrounding parts, and the fact that it appeared to be confined to the parietes, invited an operation which would have been unnecessary and very damaging to the wall, for it is impossible to remove several inches of the rectus abdominis in a transverse manner without producing irremediable injury to the abdominal coverings. There was nothing in the examination of this case to suggest inflammation and everything to convince one of a new growth.

CASE 5.—The patient in this case was sent to me for an opinion by my friend Dr. G. McCallum of Geelong. My advice to him was to explore by operation, but I failed to divine the nature of the case. The patient was an otherwise healthy man, 56 years of age. He complained of a tumour in the stomach which he noticed eight months ago, but it was only for the last six weeks, when he began to get pain after meals but no vomiting, that it had caused him any trouble. He said that the tumour was steadily increasing in size. He had lost over two stones in weight. On examination there was a swelling visible on inspection in the left hypochondrium and part of the epigastric region. The ribs protruded more on this side and a rounded edge was to be felt at the lower part of the swelling which was dense on palpation and could not be separated from the ribs. The percussion note over it varied at different times, probably owing to varying states of the stomach. Dr. McCallum made an incision over the mass and on getting into the rectus muscle met with a very tough and gristly substance which bled rather freely. He continued the incision so as to open the peritoneal cavity. On this surface, corresponding to the mass to be felt from the outside, was a soft fungiform excrescence. The stomach itself was practically free, only one small adhesion having formed. The wound was closed after a small portion of the mass had been removed for examination, which examination disclosed undoubted evidences of syphilitic infiltration.

My friend and colleague, Dr. G. R. W. Adam, kindly allows me to relate a case occurring in his practice where he removed what he believed to be a fibroma growing in the anterior abdominal wall. It was a hard, well-defined tumour, discoid in shape, being flattened antero-posteriorly and about three inches across. It was somewhat moveable and slightly painful to touch. The patient, a married woman, aged 40 years, had a serious illness—viz., pericarditis—some 10 months previously, after which this tumour developed in the right iliac fossa. No specific history could be obtained. Dr. Mollison pronounced the tumour to be a syphilitic gumma; on its peritoneal aspect the omentum was adherent to some extent. In this particular case but little harm was done, as the tumour could be largely enucleated, but Koehler reports a case in which he removed what he thought was a large sarcoma extending from the left hypochondrium to the inguinal fold and from the linea alba to the axillary line; part of the diaphragm was included in what was removed. The patient recovered, it is true, but his abdominal wall was only skin all over the

operated side, and the microscope proved the tumour to be not sarcoma but a huge syphilitic gumma.

This specific inflammation may be very circumscribed in its margins, so much so as to cause one to think that the mass must be a neoplasm, so marked is its definition. In other cases the edge is infiltrated and the margin ill defined, blending gradually with the normal tissues, and in yet others clean-cut definition may obtain on the palpable edge of the mass and infiltration in other parts of its circumference. Clinically it is most interesting to note how the mass of newly-formed material soon poisons the owner even as a really malignant tumour does. There was marked loss of strength, weight, and health in these cases which lent colour to the diagnosis of malignant tumour. Again, I believe if such a gummatous mass had attained any more than moderate proportions medicines alone would not remove it unless it had broken down or burst, by which time the patient would probably have been brought very low indeed. Incision is wanted to start the reparative process. I have not seen a gumma of the abdominal wall which has so far advanced in fibrosis as to resist both incision and medication, though I have met with them elsewhere.

Injury seems to play an important part in the inception of these masses as it does in other late specific manifestations and as it does in sarcoma, and this common factor increases the difficulty of diagnosis in what is really such a simple case as the following.

CASE 6.—A woman, aged 60 years, of stout habit, while making a great muscular effort tore her right rectus below the umbilicus. Bleeding occurred into the rent at the time and also some time afterwards and a large tumour resulted, which could be moved with freedom laterally but not up from below where it passed down by a long thin pedicle to the pubes and behind it. When the case came under my care it was difficult to tell whether this long pedunculated flask-shaped mass was in the abdominal cavity or in the wall and at the second bleeding which took place there was an abdominal seizure which fitted exactly that of the twisting of a pedicle. On the other hand, the tumour was somewhat flattened and felt like a fibroma or a hard sarcoma even when the examining finger was in the peritoneal cavity and a bimanual examination could be made. At one small spot only could anything like fluctuation be made out, but a second incision through the sheath of the rectus decided the diagnosis and allowed the removal of large masses of blood clot and some treacly blood from the part where the rectus had ruptured.

Abscess of the abdominal wall may sometimes simulate sarcoma very closely, and hydatid cysts, of which I know some five cases situated in the rectus, may easily deceive the surgeon. A careful examination of a patient with a hard tumour of the abdominal wall may throw much light on the case—e.g., the finding of metastatic nodules just under the skin in other parts of the body, the presence of a cancer of the breast (especially an atrophic one), or of an operation scar showing that the breast has been removed, or the recognition of specific lesions elsewhere; but when all our means of diagnosis, short of incision, are exhausted, it may still be impossible to decide between fibroma, carcinoma, sarcoma, and gumma. This makes it very advisable for us to stay our hand before we resort to a large operation for the removal of the mass and to content ourselves with a small incision into it to remove a portion for examination and to aid in its absorption should it be a gumma. If the case is sarcoma there are great mutilation and little chance of ultimate cure; if it is a case of gumma a moderate incision into the growth and appropriate medical treatment are all that is necessary.

Melbourne.

## NOTES ON THE RECENT CHOLERA OUTBREAK IN CANTON, SOUTH CHINA.

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THE presence of cholera (*Asiatica*) is no new thing in Canton. From time to time the outbreak assumes an epidemic form of grave dimensions and certain years like 1894 stand out in a peculiarly black lustre of their own.

The shops in many of the Canton streets were closed, every inmate being dead. Business was at a standstill and prices ran up enormously. The incidence amongst the foreign community was not large. This year, however, the scourge has carried off quite a number of Europeans from the small foreign section, whilst "several Tens die daily" amongst the native population. Of this last statement—a translation of what the Chinese themselves say—there is ample evidence in the difficulty of securing coolie hire, in the difficulty in getting coffins, their large importation from the towns and villages round, and in the fact that three or four times the price has had to be paid to purchase an ordinary coffin as used by the natives. Then the conditions which are so conducive to the spread of cholera have this year, as in 1894, been largely experienced. Every year some small outbreak occurs towards the end of the dry winter season, February and early March. This year the country suffered from prolonged drought, so much so that the river water for 30 miles or more above Canton in certain streams was brackish, and in Canton itself the water from the wells, the main water-supply of the Chinese, was unfit for drinking. At the same time the heat in Canton was intense for that time of the year, and the Chinese, unclean, untidy, and insanitary as are their ways, supplied other necessary conditions. Extensive hospital practice amongst the natives and not a little amongst the foreigners has enabled me to compare the course of the disease and the effects of the treatment. The onset in each case has been sudden. This was particularly marked in the earlier cases when the disease was most virulent. Diarrhoea and vomiting were early signs and in times varying from two to 12 hours the patient died. In this stage of the epidemic delay in treatment meant certain death. I have not seen one patient recover where treatment was delayed. I speak of the early weeks of the epidemic. Later the epidemic seems to decrease in virulence. Spontaneous recoveries take place. Generally speaking, the earlier the onset of cramps the worse the prognosis. My own experience has gone to show that when cramps are a well-marked condition the patient does not recover. I have noticed that severe cramps in the limbs and the abdomen and large watery stools have gone together. Amongst my European patients, as my Chinese, little cramp and only small evacuations of watery fluid have been followed by recovery under treatment. My first and my last European cases afford illustration.

**CASE 1.**—The patient was a German merchant, aged 45 years. He was not a teetotaler but was temperate. He was not overworked. He was subject to diarrhoea and "biliousness." He dined on the steamer coming up to Canton. He said that he had eaten "shrimp curry and salad." After dinner as he sat on deck chatting he felt a little fullness, so he took about 20 grains of bicarbonate of soda in water from his cabin. He retired to rest about midnight and was restless. There was a tendency to diarrhoea about 3 A.M. Between 3 and 6 A.M. he had several attacks. He got home by 8 A.M. feeling "seedy" and he went to lie down. At 9 A.M. cramps came on in the legs which continued until 10.30 A.M., when I saw him. His condition then was one of intense collapse. Cyanosis was general and he had frightful cramps. He was pulseless at the wrist and the temporal pulse was slight. The vomiting had ceased. Two large evacuations of typical rice-watery stools occurred. Restlessness was present. He was speechless or could speak only with difficulty. He gradually sank into a quiet collapsed condition, in which he shortly died. The heart reacted only slightly to hypodermic injections of digitalin, strychnine, caffeine, and brandy. Had he been seen at 6 A.M. instead of four and a half hours later he might have been saved. Just after this case I saw a Chinese woman presenting very similar condition, but delay in being called also was followed by death, neither hypodermic medication nor intravenous injection of salines being followed by any rallying effect.

**CASE 2.**—A colleague and his Chinese boy were taken ill together and both came to hospital. The boy elected to go home and was dead by 6 A.M. next morning—i.e., in 12 hours. My colleague was treated at once. On admission he was found to be suffering from diarrhoea which was faecal in character; vomiting and moderate collapse were present. The stools rapidly became typical and his appearance altered. The eyes and cheeks became shrunken, the amount of shrinkage being astonishing. The pulse was 110; slight fever only was present. The treatment consisted of rest in

bed and hot-water bottles and subcarbonate of bismuth and lime-water to try to stop the vomiting; this was of little effect, however. The stools were small, being from two to three ounces at a time only, but evidently of an irritating character. A high enema of warm water and Condyl's fluid, pink solution, was given, followed at once by 30 minims of tincture of opium, with 15 minims of solution of atropine (1 in 100). The vomiting ceased in a few minutes nor did it return as long as opium was administered per rectum. Stools occurred from every 10 to 15 minutes. The enema was repeated and 10 grains of salol were given every hour by the mouth, with 30 grains of bismuth subnitrate in one dose three times a day. Occasional doses of a pill of acetate of lead with one-twelfth of a grain of opium were given on the second and third day and the salol was reduced to four times a day (10 grains to the dose). On the second day the pulse was 98 and the stools were a little less frequent and still smelt. The cramp was not marked. On the third day the pulse was 94. The stools occurred about every one and a half hours; they were still small. After this improvement was steady. The patient took meat juice after the second day at frequent intervals. He sat up for an hour or so on the eighth day. The first formed stool occurred about the tenth day. There was no relapse. He finally went on a sea voyage in order to gain strength. The patient was not given alcohol in any form save on two occasions when from pain of cramp at the anus he fainted. In this case the advantage of immediate treatment is obvious, otherwise the patient must have shared the fate of his servant. I think that the pushing of salol (watching the urine at the same time) was a strong factor in his recovery, together with the high enemata.

Canton.

## SOME CASES OF CHRONIC PANCREATITIS.

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It is only within recent years that the importance and the frequency of chronic inflammation of the pancreas have come to be recognised. Until Riedel first called attention to the association of thickening of the head of the pancreas with cholelithiasis, chronic inflammation of the gland was not recognised as a clinical condition; and for several years the association was considered most infrequent and of no great surgical importance. In 1900 Mayo Robson, in a lecture published in *THE LANCET* of July 28th, p. 235, and subsequently in a paper read at the International Medical Congress in Paris emphasised the surgical importance of chronic pancreatitis, and repeated the statement of Riedel as to the frequency of its dependence upon gall-stone irritation.

Chronic pancreatitis as seen by the surgeon is always secondary. It is dependent upon infection extending from the intestinal canal or from the bile-passages, upon the long-standing irritation of gall or pancreatic stones, or upon the invasion of malignant disease which may be primary in the gland itself or may extend into the gland from the duodenum or stomach. Certain toxic substances brought by the blood to the gland may set up chronic inflammation; of such are the poison of syphilis, the organism of tubercle, and, it is confidently said, alcohol. Pre-eminent among all these causes we must without question place cholelithiasis. Associated with, and dependent upon, gall-stone disease may be found every grade in the extension of inflammation to the gland. In the slightest cases a little thickening of the head of the gland is found; that portion nearest to the duodenum is denser and stiffer than the body or tail. In the severer cases the whole head and a part of the body also may be enlarged and extremely hard and solid, feeling like a plaster cast of an enlarged gland. But in all cases the duodenal end is more profoundly affected by the changes which have taken place than is the body. The tail is implicated only in the long-standing and severer instances. During the last two years, since my attention was more especially directed to the pancreas in operations in the upper part of the abdomen, I have seen several cases of chronic pancreatitis. These cases illustrate the association of the inflammation of the gland with pancreatic calculus, syphilis,