tumour can be made out on palpation, but there is some rigidity of the muscles of the upper part of the abdomen. The respirations are 28 per minute.

He has pain in the chest, both in front to the left side low down and behind across the lower part. Cough not marked.

There is practically no movement of the left side of the chest, except a little at the apex of the lung. Vocal fremitus is absent over the whole of the left side, normal on the right. On percussion a resonant note is obtained all over the chest with just a slight loss of tone at the left base. Over the left side, however, true pulmonary resonance is not obtained. On auscultation, the breath sounds are faint all over the left side of the chest, but are present over the right side. They have the character of normal vesicular breathing, with a slight prolongation of expiration at the right apex. Over the bases, especially the right, there is well-marked friction. Vocal resonance not much affected; on the whole, not quite so good over the left side generally. No Hippocratic succussion tried for, as patient was so ill, but the bell sound test with coins gives a positive result, especially above the bend of the seventh rib space all round the heart.

The blood was examined and showed 14,000 leucocytes. There was no glycolytic reaction. On admission, the temperature was 101°, but it gradually fell to subnormal.

Result.

On March 21st the left pleura was explored; some foul-smelling gas escaped; afterwards pus was obtained and about 25 c.cm. was removed. Next day more pus was removed. The patient vomited at frequent intervals, and died during the afternoon.

A post-mortem examination was held on March 23rd, the following observations being made:

Body well developed, but shows some emaciation. Rigidity well marked. The left lung is adherent to the chest wall towards the apex. It is completely collapsed in its lower part, and covered with grey fibrino-purulent exudate. There is a considerable amount of stinking fluid in the left pleura. There are also adhesions at the apex on the right side.

On opening the stomach and duodenum, an ulcer is found just beyond the pylorus in the anterior wall of the duodenum, with a considerable amount of thickening around.

Immediately above the cardiac orifice in the oesophagus there is a large ulcer measuring about 1½ in. in its greatest diameter. There are two perforations in its floor, opening into an abscess cavity in the mediastinum, lined with grey necrotic material communicating with the pleura. The margin of the ulcer is rounded, and the floor is formed by the muscular coat of the oesophagus.

The stomach is dilated. The mucous membrane is swollen, injected in places, and covered with glairy mucus. The pericardial sac contains a small amount of fluid, with flakes of lymph suspended in it. The heart is covered with a layer of recent fibrinous exudate. The left lung is largely collapsed; the apex shows a considerable amount of fibrosis. Lower part covered with fibrinous exudate. There is scarring also at the apex of the right lung, and what appears to be a small bronchiectatic cavity. There is some recent fibrinous exudate at the base. The spleen is somewhat enlarged, firm, and shows chronic perisplenitis. The kidneys are somewhat enlarged, cortex swollen and pale, soft and friable.

Summary of Post-mortem Findings.—Ulcer of lower part of oesophagus perforating into left mediastinum and left pleura. Pyopneumothorax. Old tubercle at both apices. Chronic ulcer of duodenum. Recent fibrinous pericarditis. Cloudy swelling of organs.

According to Tileston¹ (1906), peptic ulcer of the oesophagus was first described by Albers in 1839. Tileston has been able to collect 41 authentic cases of the condition, to which number he adds 3 which came under his own notice.

Ewald² (1910) describes 1 case diagnosed by means of the oesophagoscope, and which was cured. Probably, therefore, at least 46 have been recorded up to date, including the author's.

The most typical and constant symptoms of the condition are: Pain, which is severe and comes on immediately after food, the site of the pain being at the lower end of the sternum and a little to the left of it. Pain is also felt between the shoulders. Vomiting is the next most constant symptom. Dysphagia is present in more than half the cases. It is due to reflex spasm of the muscle of the oesophagus from pain, and it is the main diagnostic point between the condition and gastric ulcer. Haematemesis is also a very common symptom. Perforation has occurred in 8 cases—thrice into the right pleural cavity, once into the left (author's case), once into both (in each case with pneumothorax), once each into the aorta, pericardium, and lesser omental sac.

The ulcer is usually single. It may extend into the stomach, and independent ulcers may occur in the stomach or duodenum (author's case). The situation is usually close to the cardiac orifice, and the right postero-

lateral wall appears to be the commonest site. The condition is usually found in middle life.

As regards sex, of 45 cases in which the sex was specified 31 were males and 14 females. This preponderance in the male corresponds to what one knows of duodenal ulcer. Healing not infrequently occurs, as in the recent case described by Ewald,³ and one mentioned by Quincke.⁴

REFERENCES.

- ¹ Tileston, *American Journal of the Med. Sciences*, 1906, vol. cxxxii, p. 240. ² Ewald, *Berl. klin. Woch.*, 1910, No. 5, S. 180. ³ Ewald, *Zeitschr. für klin. Med.*, 1892, xx, S. 524. ⁴ Quincke, *Deutsch. Archiv f. klin. Med.*, 1879, xxiv, S. 72.

A CASE OF TYPHOID FEVER COMPLICATED WITH CHOLECYSTITIS.

By JOHN McMILLAN, M.B., Ch.B.,

VISITING PHYSICIAN, FEVER HOSPITAL, SHOTTS, LANARSHIRE.

TYPHOID inflammatory affections of the gall bladder and large biliary passages are described at some length by Curschmann in the Nothnagel Encyclopaedia. He states that typhoid bacilli are almost constantly present in the gall bladder, that gall stones have only been found present in about half of the cases, and that the result of infection varies, in many cases there being no ill effects whatever while in others inflammation is produced, which may go on to pus formation or ulceration. Distension and slight swelling of the gall bladder has not been uncommon in my experience, but the case about to be described is the first instance in which I have seen any serious conditions arise in the gall bladder. Our hospital records do not show a single case of cholecystitis.

In respect of general literature, fatal forms only seem to have been noted when the condition was first recognized, but Westcott, quoted in Keen's *Surgical Complications*, tabulated 74 cases of typhoid infection of the gall bladder, of which 30 resulted in perforation. Osler mentions 3 cases operated upon at the Johns Hopkins Hospital, and Sir Hector Cameron, in a recent issue of the BRITISH MEDICAL JOURNAL, mentioned a case which he operated on years after the patient had suffered from typhoid fever.

The case here described was that of a married woman aged 23. She was one of a series of cases which occurred in a mining village, where the disease was spread by personal contact. A brother of hers had been removed to the Shotts Fever Hospital on December 15th, 1910, and just before his removal the patient, who was eight months pregnant, admitted having kissed him. Within fourteen days she began to complain of feeling unwell, and on December 31st, 1910, took to bed.

Next day I was consulted, and found her suffering from symptoms suggestive of typhoid fever, including severe frontal headache, high temperature, and furred tongue. A specimen of blood was taken for Widal's reaction, and proved negative, but two days later (January 3rd) another specimen of blood gave a positive reaction, and arrangements were made for removing the patient to hospital.

State on Admission.—The conditions upon admission to hospital, January 5th, 1911, were those of classical typhoid fever, and the case presented no unusual symptoms during the first eight weeks of illness. During the first week of illness the patient was nursed at home, and admitted to hospital about the beginning of the second week of illness, with her temperature ranging from 102° to 103° F.

Progress.—During the third week of illness the oscillations were of the usual type, and the temperature fell by lysis, becoming normal at the end of the third week. On February 6th she gave birth to a healthy female child. Labour was easy, as the child was very small and emaciated, weighing only 4 lb. The temperature rose to 101° F. on the day of confinement, but was down on the following day. The pulse was rather weak. On the following day the patient was rather stronger, and gradually improved. On the third day after being confined, as the breasts became engorged with milk, the child was put to the breast, and continued to suckle along with artificial feeding until February 23rd.

On February 11th the patient was able to get out of bed, and with a gradually increased and more liberal diet she gained strength rapidly.

Treatment.—For the first four weeks in hospital the treatment was of the simplest nature. To the ordinary milk diet was added thin Benger's food, and sanatonogen, 1 oz. per day. A dilute sulphuric acid mixture four times a day was also administered. Afterwards strained soup and thin flour gruel was given.

Onset of Cholecystitis.—By the end of the eighth week the patient was considered about fit for discharge, when suddenly, on February 23rd, she felt an acute pain on the right side of the abdomen and vomited about a pint of thick yellow fluid. As the pain was very severe, she was given half a grain of morphine hypodermically in the forenoon, and this was repeated again in the evening, as the pain was again beginning to trouble her. While the pain was severe she perspired freely. Her temperature was subnormal at first, but in the evening rose to 101° F.; there was dullness, tenderness, and resistance on the right side in the region of the gall bladder, the dullness being continuous with the liver dullness, and extending down to the level of the umbilicus. Hot laudanum stupes were applied continuously all day and during the night.

On the following day the temperature was down to 100° F. She had still a good deal of pain and was sick, but did not vomit. On account of the nature of the pain, the faeces were carefully examined for gall stones, but none were found. This condition continued until March 19th, there being severe pain almost daily, which had to be controlled with morphine. The temperature was very irregular, at times being subnormal, when the paroxysms of pain were very severe, then, after a feeling of cold and shivering, rising to 102° or 103° F., and on one occasion to 105° F. She was inclined to be sick and did not take nourishment well and lost flesh, though the swelling seemed to be gradually getting less—indeed, the lower margin on the enlarged gall bladder was now 2 in. higher than on February 24th and 25th.

Operation.—As she seemed to be losing ground and suffering much pain, it was deemed, after consultation with Dr. J. T. Wilson, the County Medical Officer of Health, advisable to open the gall bladder, and the operation was performed by Dr. Peter Paterson, of Glasgow, on March 20th, who opened the gall bladder by a vertical incision through the right rectus muscle. The gall bladder, which was small, firmly adhered to the colon, while its walls were thick and very friable. On opening it, an ounce of thick ochre-like pus escaped, and two gall stones about the size of peas were removed. Drainage was provided by a large rubber tube stitched to the incision in the gall bladder.

Result.—The bile drained away freely at first, but gradually decreased to 1 oz. in the day, upon which the tube was removed. When the tube was removed, on April 2nd, six rounded, rough concretions were found, which were very friable, two being broken in being removed. The further history of the case was uneventful, and on May 24th she was dismissed from hospital feeling fit and well, the wound having healed perfectly. The child was healthy and continued to thrive. The blood when tested six weeks after birth gave the Widal reaction.

The Fluid from the Gall Bladder.—Dr. J. Hume Paterson, who examined specimens from the case at the County Bacteriological Laboratory, furnished reports which may be summarized as follows:

Specimen No. 1 was a mixture of blood and purulent yellow material taken at the time of the operation. Smears prepared from this material and cultures on ordinary agar and McConkey's bile-salt agar plates showed an organism in great numbers that morphologically and culturally was identical with *Bacillus typhosus*. As this was a mixed specimen containing blood from the wound as well as fluid from the gall bladder, and as there was hope of obtaining further specimens, the organism found was not submitted to differential tests with the various carbohydrates, etc., but the patient's blood gave an agglutinating reaction.

Specimen No. 2 was bile fluid draining from the gall bladder. Smears and cultures showed an organism in great numbers that morphologically and culturally was identical with *Bacillus typhosus*. The usual subcultures were made with colonies from the ordinary agar plate, with the result that the organism was found to be *Bacillus typhosus*. Thus a culture in taurocholate broth gave with glucose a slightly acid reaction; with lactose, saccharose, and dulcitol, no acidity; with mannite, slight acidity; litmus milk gave a slight acidity, but no coagulation. The patient's blood gave an agglutinating reaction.

Specimen No. 3 was gall stones (5 in number, with several fragments). The whole stones were each about the size of an ordinary pea, pale yellow in colour, with nodular glistening surface. They were readily broken down, being of very soft consistence. Dissolved in hot absolute alcohol, allowed to recrystallize, and examined microscopically, they were found to be composed of cholesterolin crystals and mucin. Two of the stones were washed well in absolute alcohol, and then in sterile water. They were then split open with a sterile knife, and smear preparations made from their centres. These were stained and examined for micro-organisms with negative results.

The more important points in this case might be summarized thus:

1. The presence of almost continuous constipation throughout the whole course of an ordinary typhoid illness.
2. The development of inflammation of the gall bladder during convalescence, about the eighth week of illness.
3. The development of peritonitis in connexion therewith, forming adhesions between the gall bladder and the colon.
4. The presence of *Bacillus typhosus* in pure culture, and
5. The presence of a few gall stones, consisting of cholesterolin and mucin.

In conclusion, I wish to express my thanks to Dr. Peter Paterson, the Surgeon, and Dr. J. Hume Paterson, the Bacteriologist, who were associated with me in dealing with the case. Also to Dr. J. T. Wilson, the Medical Officer of Health for Lanarkshire, for much helpful advice, and for permission to publish my notes.

A CASE OF FIBROMYOMA OF THE STOMACH.

By DOUGLAS GORDON CHEYNE, M.B., CH.B.,
RESIDENT MEDICAL OFFICER, ROYAL WATERLOO HOSPITAL.

THE rarity of the case, of which I here give a few notes, is my excuse for reporting it; taken in conjunction with the case which Mr. W. T. Green, F.R.C.S., published in the BRITISH MEDICAL JOURNAL of October 28th, 1911, its interest is increased.

Though resembling Mr. Green's case in general, in detail it was quite different and also wholly unlike any of the other older cases, notes of which were published in the same article.

In the present case the patient appeared almost unaware of the presence of the tumour and made no complaints

therefore one may presume there were no symptoms. Indeed she sought advice in our out-patient department for an entirely different complaint, namely, prolapsus uteri, and it was only by the merest chance that the tumour was discovered at all. In the out-patient department the signs were suggestive of a subperitoneal fibroid detached, or an ovarian cyst with a long pedicle. It was at that time thought that the mass was movable in all directions, but subsequently this proved to be incorrect. She was accordingly admitted into our wards as a gynaecological case.

The patient was a married woman, aged 59, who had had three children and three miscarriages. She had been subject to bleeding from the rectum after defaecation for many years, and had been wearing a ring pessary on account of a prolapsed uterus. The menopause had occurred twelve years before. About a year ago she noticed a small lump in the abdomen, and fancied it had been getting bigger, but it had caused no symptom.

Condition on Admission.—She was a healthy, rather obese woman, with an excellent colour. Had no complaints. Teeth in good condition, tongue clean, appetite good. Bowels regular. Temperature 98°, pulse 80, respirations 25. In the epigastrium, in the middle line, is seen a distinct bulging, which appears to move a little upwards and downwards on respiration. On palpation a firm, smooth, rounded, elastic mass, about the size of a cricket ball, is felt. It permits of considerable movement in a lateral direction, being capable of being drawn over to either lumbar fossae, but does not allow movement in a vertical direction below the level of the umbilicus. It has evidently no connexion with the pelvis. The note obtained on percussion is absolutely flat. Auscultation of the stomach reveals no evidence of dilatation of that organ. Vaginal examination revealed signs of rectocele and cystocele, but otherwise nothing abnormal is found. There were well-marked external haemorrhoids, now in an inflamed condition, which probably accounts for the bleeding on defaecation. The urine was acid, specific gravity 1022; no albumen or sugar; some phosphates.

Diagnosis.—The case was seen soon after admission by Dr. Gow, who decided that, apart from the prolapse, it was not a gynaecological case, and referred it to the surgical side, where she was examined by Mr. Pendlebury, Dr. J. D. Mortimer and myself being present. On that occasion no trace of the tumour, which before had been so obvious, could be found. The next day it reappeared exactly as before, and was again seen by Mr. Pendlebury, who thought it might possibly be an omental cyst, or a pyloric tumour, and decided, subject to the approval of the patient and her friends, to do an exploratory operation. This was readily given, and an anaesthetic was administered on October 28th by Dr. J. D. Mortimer.