Clinical and other Notes

with the body erect, on the edge of a hard chair or stool of suitable height, i.e., of such a height that when the feet are planted firmly on the floor the leg and thigh will be as nearly as possible at right angles. The feet should be slightly separated. The head must be kept erect, and the chin well drawn in, the hands and arms in the position of "hips firm."

1. Lateral Exercise:—With the shoulders kept in a straight line the spine is slowly bent alternately to the right and left.

   Note.—Three things have to be guarded against. A tendency to "hunch" the shoulders, to allow one shoulder to come forward, and to allow one buttock to be raised off the chair.

2. Rotatory Exercises:—The body to be rotated alternately to the right and left.

   Note.—The only movement should be spinal, and the head and pelvis should be kept fixed. In this exercise also there is a tendency to "hunch" the shoulders, and for one shoulder to droop.

3. Forward Bending:—This explains itself.

   Note.—The shoulders must be kept back, the head erect, and the chin drawn in. The spine is held rigid.

4. The fourth exercise is different in that it requires a simple apparatus. A bar must be placed across a doorway so that the child can easily grasp it when standing erect. The child stands under the bar and grasps it with the hands wide apart, the head erect, and the chin drawn in. She then raises herself on tip-toe with the help of the bar.

   Note.—There is a tendency to pull up unequally with the arms, and also to throw the head back.

The exercises should be carried out just short of tiring the patient. They are of course in no way original, except that I can find no mention of the sitting position in any text-book.

I have found them most effective and easy to carry out, and their success has tempted me to suggest their trial to others. I am indebted to Lieutenant-Colonel C. H. Melville for some criticisms and suggestions.

CASES OF ABDOMINAL SURGERY.

BY CAPTAIN R. H. BOTT.

Indian Medical Service.

PANCYRATIC CYST—OPERATION—RECOVERY.

Case 1.—Sepoy Ali Asgarali, aged 25, service three years, was transferred from Loralai to the Combined Indian Troops Hospital, Quetta, on December 10, 1909, complaining of an enlarged stomach and pain over the pit of the stomach.

History of the Present Condition.—Patient stated that the abdomen began gradually to swell one month ago, there was pain over the pit of the stomach and vomiting, bowels were open regularly.
Clinical and other Notes

Previous Illnesses.—From his medical history sheet it was ascertained that he had previously been admitted to hospital for appendicitis (once) and for dyspepsia (once).

Condition on Admission.—Patient looked anemic and weak; temperature normal; abdomen greatly distended, fulness in each flank. On palpation the swelling appeared to be uniform; no definite tumour could be felt, the abdomen was very tense and a fluid thrill was obtainable. On percussion the abdomen was uniformly dull except over a small area in the left hypochondrium. The spleen and liver were not palpable. There was tenderness on pressure in the epigastric region. The tongue was clean, there was no jaundice. There was an apical thrill and an apical presystolic murmur over the cardiac area, and the pulse was small, regular and slightly quickened. There was slight oedema of the feet. The urine was normal. There was no history of syphilis.

Treatment.—Milk diet, rest in bed, calomel and saline purge, and tincture digitalis ηx. t.d.s.

December 12, 1909.—Paracentesis abdominis—in middle line, midway between pubes and umbilicus. Seventy-eight ounces of fluid withdrawn, pale straw-coloured. Abdomen slightly lessened in size as result of this, and no more fluid could be withdrawn through the cannula, although a fluid thrill was still present, and dulness on percussion was obtained in the flank.

December 15, 1909.—Abdomen slightly larger, pain and pulsation (transmitted) in epigastric region.

December 18, 1909.—Tongue furred, epigastric pain increasing, abdomen very tense.

December 21, 1909.—Paracentesis abdominis again performed, in same situation as on previous occasion, 45 oz. fluid withdrawn, abdomen still protuberant and elastic.

December 22, 1909.—Pulse rapid and weak, epigastric pain continues; last evening commenced vomiting large quantities of dark bile-stained fluid.

I was asked to see him on the morning of the 22nd, and found him lying in bed hardly cognizant of what was going on around, with an almost imperceptible radial pulse, with frequent vomiting, which was becoming fecal in character. I decided to do an exploratory laparotomy at once.

After preparation of the skin, an incision was made slightly to the right of the middle line, 3 in. in length, commencing about 5 in. above the umbilicus and carried downwards, extending through the skin, rectus muscle and peritoneum. The peritoneum under the upper part of the incision was normal, but over the lower part was thickened and inflamed.

On opening the abdominal cavity the stomach presented in the upper part of the wound. The hand passed within the peritoneum felt a tense elastic fluctuating swelling, filling practically the whole of the abdominal cavity; no intestines were seen or felt.
The omentum beneath the greater curvature of the stomach was scratched through and a swelling containing fluid was opened, some two gallons of dark brown foul-smelling fluid was evacuated, gauze pads being packed around the opening to prevent contamination of the general peritoneal cavity; the inner wall of the cavity was covered with material looking like shaggy lymph, and the walls of the cavity were about 3/8 in. thick. After evacuating the fluid the liver was seen to be normal in size and the general mass of intestines was situated below the swelling, filling the pelvis. No free fluid was found in the peritoneal cavity.

The edges of the opening in the cyst were brought together by interrupted silk sutures, except at one place where a large rubber drainage tube was inserted, and the edges of the cyst at this place were sutured to the margins of the abdominal incision. The peritoneum was sutured with interrupted silk sutures, and the rectus and skin with interrupted salmon-gut sutures except where the drainage tube passed through and dressings applied. The cyst arose from the region of the pancreas.

During the operation the radial pulse became imperceptible, and liquor strychninæ and ether were given hypodermically, and strong hot coffee was given per rectum on the patient's return to bed.

Digitalin 1/80 gr. was given hypodermically on the night following the operation, owing to the extremely weak pulse. The patient did not vomit after the operation.

December 23, 1909.—He passed a fairly good night and the following morning was taking small quantities of milk and soda-water, and mutton essence.

December 24, 1909.—Patient rather better. Digitalin 1/80 gr. hypodermically again given during the night.

Wound dressed, looks healthy, very little dark brown, rather foul-smelling discharge from drainage tube, cavity washed out with sterilized normal saline solution. Temperature normal.

December 26, 1909.—Vomiting on evening of 25th, all food by mouth stopped for twenty-four hours, except a teaspoonful of tepid water occasionally. Then given a gastric sedative mixture, and small frequent feeds of milk and soda-water. Temperature normal.

December 27, 1909.—Patient much better, the cyst is now being daily washed out with hydrogen peroxide lotion, with the result that the discharge is becoming much less offensive.

The patient now made practically an uneventful recovery, except that the discharge from the sinus had a particularly irritating effect upon the surrounding skin, which had to be protected by boracic ointment spread on lint and applied to the skin.

On February 24, 1910, it was noted that the patient had had slight evening fever for four days, and on examination there was a well marked induration situated apparently in the upper part of the left rectus
abdominis muscle, with transmitted pulsation; hot fomentations were applied, and the induration and evening fever quickly subsided; what the cause of this induration was I do not know.

The discharge finally ceased and the sinus closed on March 26, 1910, rather more than three months after the operation.

I heard of the patient six months later, when he felt and was said to be in perfect health.

The chief points of interest in this case in my opinion are:

1. The shortness of the history.
2. The large size of the cyst.
3. The offensive nature of the contained fluid. I think that probably hemorrhage had taken place into the cyst cavity, and that the effused blood had been partially digested.
4. The extremely irritating effect upon the surrounding skin of the fluid escaping through the drainage tube after the operation.
5. The free fluid in the abdominal cavity that was drawn off on each occasion that paracentesis abdominis was performed, and was probably due to the pressure of the cyst upon the portal venous system.

I was unfortunately not able to have the urine tested for Cammidge's reaction, nor was I able to get the cyst contents examined for the characteristic reactions of pancreatic fluid. It will be noted that both his previous admissions to hospital were for abdominal complaints.

**INTERNAL HEMORRHAGE—OPERATION—RECOVERY.**

**Case 2.**—Ram Dial, a syce, aged 20, was admitted to the Combined Indian Troops Hospital, Quetta, at 6 p.m. on May 24, 1911, complaining of pain in the belly.

*History of the Present Condition.*—Patient stated that he was kicked in the belly by a mule at 11 a.m. on May 24, 1911, whilst out of Quetta cutting grass; he was then brought to his lines on a mule.

*Condition on Admission.*—Patient was lying in bed, dorsal position, knees drawn up on abdomen and a very anxious expression on his face. He complained of severe general abdominal pain. His pulse was very rapid and thready and could not be accurately counted. Temperature 99·6° F. The abdomen was rather full, and moved slightly on respiration; on palpation there was general pain and some resistance all over the abdomen, but the pain and resistance were most marked in the middle line below the umbilicus. There was dulness in the hypogastric region and an impaired note in both flanks; and no area of liver dulness could be made out anteriorly. No fluid thrill was obtainable.

After the accident and before coming to hospital he had passed a motion and urine which appeared to be natural. He vomited two or three times before admission to hospital, but did not notice any blood in the vomit.
I concluded that he had probably ruptured some organ within the abdomen, and decided to perform laparatomy immediately. After sterilization of the skin of the abdomen a median longitudinal incision 2½ in. in length extending downwards from just below the umbilicus was made.

On opening the peritoneum a large quantity of dark coloured blood escaped; there was no escape of gas from the peritoneal cavity. No laceration of the gut was discovered, and the liver felt normal. The capsule of the spleen was lacerated near the upper pole of the organ, which did not appear to be enlarged. The kidneys appeared to be normal. The pelvis was full of dark-coloured fluid blood, which also occupied the greater part of the peritoneal cavity. I aspirated about one and a half pints of blood, but could not discover any bleeding vessel. The condition of the spleen certainly did not appear to be sufficient to account for the very free haemorrhage which had occurred, and I am of opinion that one of the vessels in the mesentery was torn, probably a vein. Shortly after the operation commenced the patient's radial pulse became impalpable, probably the low blood pressure accounted for the fact that I could discover no bleeding vessel. During the intra-abdominal manipulations the patient ceased breathing, and the heart became very slow and irregular. I attempted to massage the heart through the diaphragm; this certainly appeared to have a markedly beneficial effect, and the radial pulse reappeared. Artificial respiration was performed until breathing became re-established.

Owing to the very serious condition of the patient, I did not think it advisable to prolong the search for the source of the haemorrhage, and I closed the abdominal incision with a single layer of interrupted salmon-gut sutures, and applied dressings and a tight roller bandage. Liquor strychninæ was given hypodermically during the operation, and normal saline solution two pints with brandy 1 oz. at a temperature of 110° F. was given per rectum on the patient's return to bed, and the foot of the bed was raised.

When making the abdominal incision there was no bleeding, owing, I presume, to the very low blood-pressure.

May 25, 1911.—The patient passed a restless night and vomited several times. I ordered no food to be given by the mouth. An injection of two pints of normal saline solution was given per rectum at a temperature of 100° F. also morphia ½ gr. was given hypodermically.

His pulse showed a decided improvement after the saline injection, and came down to 90 per minute. His temperature was normal.

May 26, 1911.—Temperature rose to 101.4° F. last evening, normal this morning. Pulse 92, good.

Complained of pain in his abdomen, which was markedly distended. Enema terebinthinæ ordered, rectal tube passed, and inj. atropina sulphatis ½ gr. hypodermically ordered every four hours until three
injections had been given; by these measures the distension was greatly relieved.

Patient still vomited if milk or water was given by mouth, so after the turpentine enema, two pints of warm normal saline solution was given per rectum and retained. Abdominal wound dressed and looked healthy.

May 27, 1911.—Patient better, had a better night, pulse rate and temperature normal, and is now able to retain small quantities of milk and water given by the mouth. Bowels moved naturally in the evening. From this date the patient made an uninterrupted recovery, and was discharged from hospital on June 6, 1911.

I think there are some points of interest in this case:—

(1) From the condition of the patient when I saw him laparotomy was certainly indicated, but beyond finding out the actual condition of affairs within the abdomen and thus satisfying my own mind, I do not think the patient derived any benefit from the operation. I did not ascertain the actual source of the haemorrhage, as owing to the very low blood pressure the bleeding had stopped when I opened the abdomen.

(2) The large amount of haemorrhage. I have never previously seen so much blood in the peritoneal cavity. I did not attempt to remove very much of it as I am convinced that provided it does not become infected it does no harm, and I considered it much more important in this case to close the abdomen and get the patient back to bed than to spend time over an elaborate peritoneal toilet.

(3) I think the extravenous injection of warm sterilized normal saline solution is by far the best method of combating severe haemorrhage or collapse; in this case I wanted the patient's blood-pressure to remain low, and I considered it safer to give a small quantity of salt solution per rectum, whence it would be more slowly absorbed into the system.

(4) I had the good fortune a few days after this operation to see another patient admitted to hospital with a similar history and condition. Patient No. 2 was also a syce; a horse had broken loose in the lines and trodden on the man's abdomen while he was lying on the ground asleep. This man was known to have an enlarged spleen. On admission to hospital he was somewhat collapsed, and complained of severe abdominal pain, especially on the left side. His pulse was 104 but of fairly good volume. There was dullness on percussion in the left loin and flank. Both Captain Browse, L.M.S., who asked me to see the patient with him, and I agreed that there was probably a rupture of the spleen and internal haemorrhage, but as the man's condition did not appear to be critical, we decided to watch him for some time, and Captain Browse ordered ice to be applied to the splenic region. The patient did not get any worse, and within ten days the symptoms disappeared. It was noticed that when he left hospital his spleen was much smaller than it was prior to his admission.
Captain Browse informs me that he has, on several occasions when doing post-mortem examinations, found enlarged spleens bearing marked scars, some of which, in all probability, were the result of previous ruptures.

A CASE OF ANEURYSM OF AORTA.

By Major F. M. Mangin.
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Private G. was admitted into the Cambridge Hospital, Aldershot, on June 14, complaining of more or less constant pain involving the whole chest, but more marked over the cardiac area. On examination the heart was found to be enlarged and dilated, the apex-beat being diffuse, and about 1 in. outside the nipple line. On admission the pulse was feeble, compressible and rapid, the heart sounds were faint but normal, no bruit being audible. On the evening (9.15 p.m.) of the 14th, patient was attacked with a severe and typical seizure of angina pectoris, necessitating the injection of strychnine, the inhalation of oxygen, amyl nitrite and digitalis. The attack was followed by much restlessness and frequent coughing attended by the expectoration of much blood-stained mucus. On the 15th, the patient's condition remained unaltered, and coarse râles were audible all over the chest in front; as the day went on the pulse became more rapid and feeble, 116 per minute, and the respirations 46. During the night the patient became very faint and collapsed, brandy and strychnine were administered, and he rallied. The cardiac distress was relieved by propping up the patient. A second attack occurred at 4 a.m., which was again relieved by the administration of stimulants. On the morning of the 16th his condition was very grave; during the day he gradually became worse, temperature remaining at 96°, pulse 108 to 124, respirations 48 to 52; cough and moderately profuse blood-stained mucous expectoration continued, together with vomiting, which had appeared on the 15th. Patient remained in this condition, and died suddenly of cardiac failure at 8.5 p.m. June 16.

Post-mortem, thirty-eight hours after death. The body was fairly well nourished, rigor mortis present. Estimated weight about 10 st. On opening the thorax the lungs were found to beœdematous, the right weighing 29 oz. and the left 25 oz. The heart was enlarged and the ventricles dilated. The cardiac walls generally were thinner than normal, and there was a fatty deposit on the surface of the organ. The valves were all normal.

In the wall of the aorta, immediately above the left posterior cusp of the aortic valve, an aneurysm the size of a small hen's egg had formed; it was conical in shape, and involved the left coronary artery, the orifice of which was found blocked by a recent small clot. The aortic walls in the neighbourhood of the aneurysmal opening presented appearances of atheroma.