worthy of the censure with which it is stigmatised; viz., hermetically closing such wounds. On the contrary, the better practice would be to make free counter-openings, and let the collection of purulent fluid, almost sure to supervene, have a ready means of escape.

We had a considerable number both of shell and bullet-wounds which traversed the walls of the chest without penetrating the pleural cavity. I have seen bullet-tracks ten, and even twelve, inches long, not causing penetration, or even fracturing the ribs, whose elasticity and freedom of motion must, to some extent, protect them. In several instances we had one or more ribs fractured, always producing more or less serious symptoms, and sometimes even death. We had a remarkable case in which a bullet traversed the axilla from behind forwards. The points of entrance and exit were such as to make it seem impossible that the great vessels and nerves could escape. Yet there was no damage done to any important part.

Of penetrating wounds of the abdominal cavity we had but few, and those few all died rapidly of peritonitis and shock. We were not tempted, as suggested by an eminent German professor, to perform an operation, as if for ovariectomy, to find out the perforated stomach, intestines, or liver, as the case might be, sew the wounds up, clean out the cavity of all clots and foreign substances, close the external wound, and then hope for a favourable result. I fear the hope would have to be deferred for a very long time.

We had several instances of wounds of the abdominal parietes without penetration. There was little that was peculiar about them, and it is sufficient to cite one example.

CASE XXV.—Blondel was sent to us from another ambulance on the 14th September, having been wounded by a fragment of shell on the 1st. Dr. Clarke extracted two large pieces of lead-casing, which had lain embedded in the abdominal muscles all that time, causing very little trouble. The patient soon recovered sufficiently to leave the hospital.

We had two or three examples of extensive subcutaneous ecchymosis of the abdomen and thighs from a shell-explosion, which did not cause other mischief.

In connection with abdominal injuries, the following cases are of considerable interest.

CASE XXVI.—Jean Allary, 5th Regiment of the Line, was wounded on the 1st September. The ball entered the outer side of the left thigh, three inches below the great trochanter, and slightly anterior to it. The wound of exit, much smaller in size, was situated a little to the left of the fourth lumbar vertebra. When the dressings were removed, a large quantity of fluid feces came away from both wounds, but chiefly the inferior one. The patient remarked that all he swallowed flowed the wrong way. When the abdomen, which was neither swollen nor painful, was pressed upon, the bowel contents could be made almost to jet out. In the course of a fortnight the wound in the loin closed. In three weeks exactly the feces ceased for a time to flow by the lower opening. This wound re-opened for a short time; but when the patient left hospital, on October 8th, the discharge had ceased, and he was quite convalescent. Allary was lying down when he was hit, and the ball must have twice perforated some portion of the descending colon without opening the peritoneal cavity.

CASE XXVII.—Was also an example of double fecal fistula. The ball entered near the apex of Scarpa's space on the left side, and emerged through the centre of the right buttock. In this example the rectum must have been wounded. It would be interesting to learn if any constriction followed upon recovery.

CASE XXVIII.—Hautefeuille, a young fellow of twenty-two years of age, a soldier of the 1st Marines, also wounded on the 1st September, was struck by a ball, which entered on the left side of the coccyx, traversed the rectum and bladder, and emerged just above the symphysis pubis. For a considerable time all the feces passed by the posterior opening, while the urine flowed entirely from the anterior wound. He recovered without a single unfavourable symptom. Both wounds had closed by the 18th September, and remained so until his discharge from hospital on September 25th, when he appeared as if nothing had happened to him.

In a Belgian ambulance I saw two cases of urinary fistula recovering without a bad symptom. In one the ball had entered just above the pubic symphysis; and, as it had not made its way out, the patient will probably have to submit to a future operation for the extraction of the bullet, as had a soldier during the American War, in whose bladder a piece of shell lodged. In the other case the ball entered just above the tip of the right trochanter major, passed through the iliac bone, and emerged a little to the left of the symphysis.

There were several other cases of similar injury which I did not see, and which, I was informed, were doing well. *A priori*, one would certainly not expect that such serious visceral lesions would produce so little constitutional disturbance.

CASE OF OVARIOTOMY: TUMOUR TORN AWAY FROM THE PEDICLE WITHOUT HÆMORRHAGE; NEITHER CLAMP NOR LIGATURE REQUIRED.*

By RICHARD H. MEADE, F.R.C.S.,

Consulting-Surgeon to the Bradford Infirmary.

ON May 20th, 1870, I saw, in Halifax, with Dr. Synnott, a lady suffering from ovarian disease, which she was anxious to have removed by operation. She was a married woman, aged 48, who had had several children. Menstruation ceased four years before, and she had noticed the abdominal enlargement (which commenced on the right side) for about two years. Her general health was good, and the distention of the body was not so great as to cause much interference with respiration. On examination, the abdomen was found to be filled with a thin fluid (fluctuation being very distinct), but the walls were not so tense as to prevent a large hardish tumour from being felt at the lower part towards the right side. On percussion, resonance was met with in the epigastric region.

I recommended tapping, as a preliminary measure, before any other operation was decided upon. This being agreed to, I introduced a trocar, and removed two gallons of clear yellowish ascitic looking fluid. After this had escaped, a freely moveable tumour, as large as a child's head, four or five years old, could be plainly made out, apparently springing from the right ovary. No untoward symptoms followed the tapping, but the abdominal cavity rapidly filled again with fluid; so that in five weeks she was about as large as before. The patient being still anxious to have something more done, I operated on June 24th for the removal of the tumour.

The patient being under the influence of chloroform, I made an incision about four inches long in the lower part of the linea alba; carefully opened the peritoneum; and evacuated nearly two gallons of ascitic fluid. On enlarging the opening in the peritoneum to the same extent as the external wound, the ovarian tumour at once came into view. I now directed an assistant to compress the abdominal walls with his hands, one placed on each side, so as to press the edges of the wound backwards; while I endeavoured with my hands to draw the tumour partially through the opening. In doing this, the walls of several of the small cysts of which the tumour was principally composed (being very thin), were ruptured by the pressure of my fingers; and a considerable quantity of thick brown fluid, like dark-coloured linseed-tea, escaped. The edges of the wound were so well compressed that none of this ovarian fluid was allowed to enter the peritoneal cavity. The tumour was now found to be firmly adherent to the free extremity of the great omentum; these adhesions were carefully and slowly torn through, and the whole mass was then easily drawn through the wound. It was now found to contain a good deal of heavy solid matter; and, on turning it over to examine its attachments, the pedicle, which was small and thin, to my dismay and annoyance at the time, gave way, and the tumour tore itself loose from its connexions. Fearing hæmorrhage, I kept hold of the remains of the pedicle, but very little bleeding followed; and I could find no vessel requiring ligature.

I kept a large piece of softened sponge applied to the torn pedicle, as well as to the adherent portion of omentum (which was much thickened) for fully a quarter of an hour, the abdominal walls being well covered up with hot flannels; I also had the actual cautery in readiness; but all oozing soon ceased; so I left the pedicle without any fastening, and proceeded to close the wound. I inserted a number of thick silk sutures greased with carbolic ointment (made by melting one part of carbolic acid with seven of lard) deeply through the sides of the wound; but *not* through the peritoneum. The line of incision was then covered with a piece of lint, thickly spread with the carbolic ointment; and over this a sheet of cotton-wool and a flannel bandage were applied.

The patient took chloroform very well, but retched slightly before the incision was closed. After she was placed in bed, and before the effects of the chloroform had quite gone off, I injected a sixth of a grain of hydrochlorate of morphia under the skin of the arm. The pulse was now rather feeble, but not quick, and she looked pallid and felt cold; but upon my seeing her again in an hour and a-half, I found her with a moderately full pulse of only 80 in the minute, and comfortably warm. There had been no more retching nor sickness, but she complained of abdominal pain: so I injected another sixth of a grain of morphia. On leaving, I directed that she should swallow nothing but a little iced water, with a few drops of brandy in it, if she were faint.

* This paper was announced to be read at the last meeting of the British Medical Association at Newcastle-upon-Tyne, but the author was unable to be present.

On the following morning (fifteen hours after the operation) the pulse remained at 80; there was a plentiful secretion of urine, and she was very comfortable.

This patient recovered almost without a bad symptom; I let the sutures remain until the sixth day, when, on their removal, the wound was found to have united by the first intention. No suppuration occurred, except at one or two of the suture-holes, where a little ulceration had been caused by the pressure of the silk. On July 21st, less than a month after the performance of the operation, she was downstairs, and had been out of the house, able to walk without pain or inconvenience. She then looked rather pale and anæmic, but the wound was firmly healed; there was little or no abdominal tenderness, and no return of ascites; but a little deep-seated hardness remained on the right side. I heard through one of this patient's sisters that she continued well at the beginning of September.

Upon examination of the tumour after its removal, it was found that, in addition to the cysts filled with dark-coloured fluid, there also entered into its composition considerable masses of gelatinous colloid-looking matter, with others of a firmer consistence and brain-like appearance, containing clots of blood: showing, I fear, that the disease was of a malignant character.

It is difficult to account for the large quantity of ascitic fluid which was met with, unless there were some secondary deposits of cancerous matter on the peritoneum; but the history of the case would hardly lead to that supposition. The presence of a considerable amount of serous effusion in the peritoneal cavity has, however, one advantage in cases of ovariectomy; it seems to render the membrane less liable to take on acute inflammation, its delicate secreting surface having undergone some change; and after the removal of the ovarian disease it does not seem to be resecreted.

In some of the medical journals a case of ovariectomy has been reported (extracted from an American periodical), in which Dr. Julius F. Milner removed a very large ovarian tumour by enucleation, without using either clamp, ligature, or cautery, and without hæmorrhage. When I commenced the above operation I had no idea of imitating his proceeding, but when the tumour (to my horror at the time) enucleated itself, and there appeared to be no bleeding from the pedicle, I determined to follow his example, and leave the torn surface unsecured; thinking that the risk from hæmorrhage was less than that from inflammation from the presence of a foreign body in the peritoneal cavity. My case turned out successfully, and I think I should venture to repeat the proceeding in some special cases; for instance, where the pedicle does not appear to be very vascular, when the attempt might be made to tear the tumour gently from its connexions (in the same way as adhesions are generally separated); but a firm hold should be kept of the pedicle, so that it might easily be secured in case of bleeding.

MEDICAL AND SANITARY NOTES OF A VISIT TO THE MODEL MALE PRISON AT PALLANZA,* LAKE MAGGIORE, ITALY.

By DYCE DUCKWORTH, M.D., F.R.C.P.,
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INASMUCH as the subject of Italian Prisons attracted much attention in England some years ago, and led to the adoption of a better *régime* in these institutions, it may not be uninteresting to the readers of the BRITISH MEDICAL JOURNAL to learn something of the management of one of the largest and most important of them.

Pallanza is the chief town of the Italian district of Lago Maggiore, and has a population of four thousand. Its situation is perfectly lovely; and a convict prison is perhaps the most unlikely "lion" a traveller would expect to find in such a spot. On approaching the town from the lake, this establishment forms a prominent object; and its long dusky roof and lofty Etruscan-red walls, with square barred windows, are seen to tower above most of the other buildings.

Passing the sentries at the main gate, I was admitted, on presenting my card, to the Director of the Prison, who kindly sent an official to show me the various arrangements.

The building consists of a basement and two storeys, the latter being used by the prisoners, and containing workrooms and dormitories; the former is laid out with offices, and is employed by the various administrative departments. There were formerly female convicts, but these are now sent to Turin. The establishment is remarkable for the severity of the discipline which is maintained—the strictest, I was in-

formed, in any Italian prison; and only such convicts as are under long sentences are received. At present, there are three hundred and fifty in confinement; and of this number no fewer than one hundred and twenty have been recruited from the famous bands of brigands infesting the Neapolitan and Calabrian districts.

On arrival, each individual is placed in a cell, one of a group arranged in a semicircle, and isolated from the main building. Here he is cleansed, and remains for twenty days; he is then removed to his proper cell on one of the dormitory-corridors, and still further kept in confinement. Finally, he is put to some simple work, or commences to learn a trade. Absolute silence is maintained, any infraction of this rule being followed by punishment.

The men were mostly in large rooms, busily engaged with weaving, spinning, calico-printing, and shoemaking. As in other prisons, they are only known by their numbers. The workrooms are very spacious, lofty, and light. The most perfect ventilation and cleanliness prevailed everywhere. The dormitory cells, each one isolated, were in perfect order; and the common latrines were positively inodorous, owing to plentiful water-supply. Each man has a pallet-bed, mattress, and very clean sheets. Exquisite views are to be had from some of the small strongly barred windows; which, however, are higher than the occupants' heads. Many other windows only permit a view of the two outer walls, and the sentries perched on the inner one, leaning on their breech-loading muskets.

The convicts shave clean daily, and are closely cropped. I did not see a single man of fair complexion amongst them. They are mostly dark-skinned, with black hair. The physiognomical types were varied and interesting. Two ideas especially occurred to me in connexion with these men: first, that many of them appeared either partially imbecile, or as if suffering from melancholia; and secondly, that the very low animal type of face which prevailed seemed to indicate forcibly a distinct connexion between imperfect or degenerate development and innate tendency to crime. The depressed and melancholic condition of so many of these men is no doubt due to the continued influences of hard labour, monotony, silence, and confinement.*

The prisoners have two meals a day, consisting of soup and bread. Meat is served out twice a week to them. Further details are given on this head in the appended communication from the Director. Each workroom has an exercise-yard connected with it, in which a certain amount of recreation is permitted several times a day.

The hospital consists of a long corridor, with detached cells arranged on either side. There are no doors, but curtains are suspended in front of each opening. There is abundance of light and fresh air, and the patients appeared to be carefully tended. A specially instructed Sister of Charity acts as *farmacista*. The surgeon was making his visit when I entered, and politely afforded me all the information I sought.

The kitchen and other departments seemed to be in excellent order, and ingenious mechanical arrangements are employed to expedite the cooking and delivery of food.

At the junction of the two great wings of the building is situated the chapel. It resembles a lofty anatomical lecture-room more than an ecclesiastical structure. The prisoners are separated from the altar by a strong iron framework; and, when they are all present at Mass, a detachment of troops under arms, and a strong prison-guard, are on duty on each side of the priests.

In no part of the prison, except in the *celle di punizione*, are chains employed. As a punishment, prisoners are kept upright all day, with hands manacled, and feet made fast. At night, they are only allowed to lie down on the bare floor, pinioned in the same fashion.

Owing to the extreme kindness of Signor Giuseppe Costa, the Director, I am enabled to append the following outline of the Sanitary Reports of the Prison for the last thirteen years. Several tables have also been furnished to me, but the most important points in them are brought out in the subjoined notes. Hence I only append a brief statistical one.†

GENERAL REMARKS.—The Penitentiary of Pallanza was opened in 1854. One portion of the fabric is new—viz., that which contains the dormitories and workrooms of the second and third storeys. The rest is an adaptation of a very old building which served till the days of Napoleon I as a State Prison, afterwards as Public Offices, subsequently became a Judicial Prison, and still later a Prison for Women. When it was opened in 1854, there were only two hundred cells and four workrooms; then by degrees the buildings were increased both in ex-

* These observations are of some interest, because attention is now being directed in England to the criminal classes as a subject for psychological study and investigation. Dr. Maudsley, in the Gulstonian Lectures this year, alluded to this matter, and also quoted some pertinent remarks of Mr. Thompson, Surgeon to the General Prison of Scotland.

† I am indebted to my brother, the Rev. Robinson Duckworth, for assistance in this literal translation of Signor Costa's manuscript.