Clinical and other Notes.

A SUMMARY OF OPERATIONS PERFORMED AT THE CAMBRIDGE HOSPITAL, ALDERSHOT, DURING THE PAST TWO YEARS.

By MAJOR J. W. H. HOUGHTON, AND LIEUTENANT GORDON WILSON.
Royal Army Medical Corps.

The following short account is a summary of the operations performed in the Cambridge Hospital, Aldershot, from July 1, 1910, to July 1, 1912.

The total number of operations requiring an anaesthetic was 1,275, and these were fairly evenly distributed between the two operating theatres.

As the records for each theatre were separately kept, it will simplify matters if the cases are collected and classified as they appear in the records of each theatre.

The number of cases operated upon in No. 1 theatre was 629; these are classified in Table I:—

**TABLE I.—CASES OPERATED UPON IN NUMBER I. THEATRE.**

<table>
<thead>
<tr>
<th></th>
<th>No. of cases</th>
<th>Chloroform</th>
<th>Spinal</th>
<th>Ether</th>
<th>Gas</th>
<th>Local infiltration with Beta-eucaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head and neck</td>
<td>30</td>
<td>10</td>
<td>..</td>
<td>..</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Upper extremities</td>
<td>25</td>
<td>9</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>12</td>
</tr>
<tr>
<td>Thorax</td>
<td>5</td>
<td>2</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>3</td>
</tr>
<tr>
<td>Abdomen (including genitalia and rectum)</td>
<td>597</td>
<td>68</td>
<td>285</td>
<td>27</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Lower extremities</td>
<td>172</td>
<td>12</td>
<td>66</td>
<td>7</td>
<td>3</td>
<td>84</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>629</strong></td>
<td><strong>101</strong></td>
<td><strong>251</strong></td>
<td><strong>48</strong></td>
<td><strong>6</strong></td>
<td><strong>123</strong></td>
</tr>
</tbody>
</table>

The number of cases operated upon in No. 2 theatre was 646, of which:—

121 were operations under chloroform.
20 " ether.
6 " spinal analgesia.
344 " local
155 " nitrous oxide gas.

**NOTES ON TABLE I.**

Under the heading of abdominal operations (including those on the genitalia and rectum) there were five cases where gastro-enterostomy was performed for duodenal ulcer. In three of these cases the duodenal ulcer had perforated, and general peritonitis was present; one of these
recovered and is now fit. Of the two cases of duodenal ulcer without perforation, both have recovered and have since remained quite fit. In one of these cases the operation of posterior gastro-enterostomy was performed under spinal analgesia alone.

There were three cases of intestinal anastomosis, two of which have already been reported (Journal of the Royal Army Medical Corps, September, 1911; British Medical Journal, December 16, 1911).

Appendicitis.—Eighty-eight patients were operated on for this disease. In 41 of these the appendix was gangrenous or ruptured. In 36 the appendix was acutely inflamed, and the remaining 11 cases were operated upon during the quiescent period. Of the 88 cases, 5 died. The remaining 83 recovered. In 62 cases the wound was closed at the time of operation, and only 26 were drained.

In a considerable number of cases in which the abdominal wound was closed without drainage, the appendix was found and removed in a gangrenous condition, but owing to careful manipulation in its removal and thorough attention to the peritoneal toilet, the wounds healed by first intention and no complications of a septic nature supervened. Of the 88 cases of appendicitis, 65 were operated upon under spinal analgesia, and 23 under inhalation anaesthesia.

Hernia.—In 130 cases a radical cure was performed; 73 of these were for right inguinal hernia—in one of which the appendix was found in the sac—and 52 for left inguinal hernia. The operation performed in all these cases was that associated with the name of Bassini. There were in addition 1 double inguinal hernia, 3 ventral herniae, and 1 umbilical hernia.

Of the 130 cases of hernia—

<table>
<thead>
<tr>
<th>Operation Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinal Analgesia</td>
<td>96</td>
</tr>
<tr>
<td>Inhalation Anaesthesia</td>
<td>32</td>
</tr>
<tr>
<td>Local Analgesia</td>
<td>2</td>
</tr>
</tbody>
</table>

Haemorrhoids.—There were 34 operations for piles. Of these 32 were performed under spinal analgesia, and 2 under inhalation anaesthesia.

In 18 cases Whitehead's operation was performed.

Operations on Bones.—Thirty-five operations on bones were undertaken.

In four cases the patella was wired for fracture—all of these patients are now doing duty. In three cases the humerus was wired—in three the tibia, while the radius and femur were each wired once. In eleven cases an open operation was undertaken at the seat of fracture to correct displacement. In these cases it was not found necessary to use either wire or plating to maintain the improved position of the bones. The remaining twelve cases were for osteomyelitis or Stacke's operation on the mastoid.

Operations on the Knee-Joint.—Excluding the cases of fractured patella,
already mentioned the knee-joint was opened in twenty cases. Of these, fifteen were for removal of a loose semilunar cartilage, and in five other cases for disease of the knee-joint including arthrectomies for tuberculous disease.

Amputations.—There were only three amputations of a limb during this period. Two were of the leg for tubercular disease, and one of the arm for injury, the result of a motor accident.

In No. 1 theatre fifty-five cases of varicose veins were operated on—the anaesthetic used in forty-six being a solution of beta-eucaine and adrenalin, while in seven cases spinal analgesia was used, and in two cases inhalation anaesthesia. The preponderance of cases in the first group calls for a few remarks.

The local analgesic solution used was that formulated by Mr. Barker of University College. It is made up as follows:

\[
\begin{align*}
\text{Beta-eucaine} & : 0.2 \text{ gm.} \\
\text{Pure sodium chloride} & : 0.8 \text{ } \\
\text{Aq. destill.} & : 100 \text{ c.c.}
\end{align*}
\]

The solution is made in bulk, and when required for use 100 c.c. are taken and boiled in a flask. When cool ten drops of a 1 in 1,000 preparation of adrenalin chloride are added to this amount.

The routine method is as follows: The area to be operated on is prepared in the usual manner, and the course of the varicose vein is marked by means of a needle scratch. At the time of operation the course of the vein is injected subcutaneously on both sides with this solution. A short period, usually fifteen to twenty minutes, is allowed to elapse before commencing operation. At the end of this period the injected area presents a blanched appearance, and is quite ready for incision. The amount of the solution necessary to analges a varicose vein is about 10 c.c., but large quantities of this solution may be employed without fear of producing toxic effects. In all the cases in which it was employed, this solution acted admirably, the patients experiencing neither pain nor discomfort. The advantage of this method is the avoidance of a general anaesthetic, often a point of considerable importance, while it is hardly necessary to state the advantage of being able to carry out the whole procedure single handed. Absolute asepsis is required in the use of local infiltration, but with the usual precautions this can easily be maintained. With regard to the introduction of the solution subcutaneously any syringe with a fine needle may be used, but a syringe of 10 c.c. capacity is preferable. In conclusion we wish to draw attention to the complete safety of this procedure, and recommend its use as a routine measure for small operations.

The operations in No. 2 theatre were mostly of a minor character. The total number performed was 646, and they may be classified as follows:
Clinical and other Notes

On connective tissue .. .. 557
On ear, nose, and throat .. .. 53
On bones .. .. 36

Connective Tissue.—This heading includes operations for abscesses and inflammatory conditions.

Ear, Nose and Throat.—Amongst these were operations for the removal of tonsils and adenoids, and several cases of submucous resection for deviation of the nasal septum.

A MODIFICATION OF THE BURRI METHOD OF DEMONSTRATING SPIROCHÆTA PALLIDA.

By Major L. W. Harrison.
Royal Army Medical Corps.

A disadvantage of Chinese ink for demonstrating Spirochæta pallida is that unless it is prepared by centrifugation or, as Captain Frost has recommended, by the addition of tincture of iodine, the field is too granular to make the detection of S. pallida at all easy.

I have found that a more homogeneous field is easily obtained by substituting for Chinese ink a suspension of collargol. The suspension is prepared according to the directions of the makers (Chemische Fabrik von Heyden), one part of the powder being made up with nineteen parts of distilled water. The powder is first put into a black bottle (or an ordinary bottle wrapped round with black paper) and the distilled water poured on it. After standing for a few minutes the bottle is well shaken and again allowed to stand, it is shaken again and is then ready for use. The suspension is used exactly as if it were Chinese ink, a loopful of the suspected serum and one of collargol being mixed together at one end of a microscope slide and then spread like a blood-film.

The film may be examined with an oil-immersion lens as soon as it is dry; spirochætes appear white on a reddish-brown field which is almost perfectly homogeneous. The examination requires a fairly good light, but good daylight is sufficient.

As a diagnostic measure this method of demonstrating S. pallida has the same disadvantages as the Chinese ink, the chief of these being loss of the characteristic movements of the spirochæta. Under dark-ground illumination I have seen extremely delicate spirochætes in the secretion obtained from the surface of sores which were non-syphilitic. I would therefore strongly urge that particular care be taken to clean the sore beforehand so as to prevent surface organisms from contaminating the exudate from the deeper layers.