TECHNICAL MEMORANDA.

(Under this heading will be published from time to time notes on points of practical interest in regard to methods of treatment, operative and therapeutic, and on the general management of Obstetrical and Gynaecological cases in hospital and private practice.)

A Note on Early Rising after Coeliotomy.*

By ARTHUR J. WALLACE, M.D.,
Surgeon, Hospital for Women; Medical Officer, Maternity Hospital, Liverpool.

In July 1909 I first began to encourage post operative patients to leave their beds at dates earlier than had been up to that time usual after major operations. Formerly the sojourn in bed extended generally to three and sometimes four weeks, and it was certainly never less than two. In the case of women whose muscular powers were already lessened by disease or by inability to take even such exercise as the performance of household duties implied, so long a period of inactivity accentuated the muscular weakness. Such patients, on rising from bed at the end of three weeks’ inactivity, are usually enfeebled to a marked extent, for their muscles are suffering from disuse, and there then occurs the realization that one disability (disease) has been exchanged for a lesser (muscular weakness). Some patients, usually the younger ones, recover fairly quickly: the majority regain strength after some months, and a few only after a year or more. Until renewal of power is acquired muscular exercise is frequently followed by fatigue, aching or even pain, any of which may be regarded by the patient as an indication that the operation has not been successful. No doubt massage and the careful practice of simple muscular exercises would lead to rapid improvement, but massage is as far beyond the pocket as muscular exercises are beyond the comprehension of the average hospital patient.

In all case patients were merely encouraged to leave their beds, nothing suggestive even of compulsion being employed. As a rule the simple suggestion of getting up was accepted with eagerness, and indeed many begged for permission to leave bed before they were really fit to do so. In estimating the fitness of a patient for early

* Read before the North of England Obstetrical and Gynaecological Society, at Sheffield November 1911.
rising, there were taken into account the rallying powers displayed by the patient after operation, the nature and extent of improvement day by day, the existence of normal temperature and pulse-rate, the absence of gastric and intestinal symptoms (nausea, vomiting, etc.), and, finally, the state of the wound.

The subject involves a consideration of the state of the parietal wound, for its condition must naturally be the crux upon which early rising depends. The actual field of operation in the pelvis can be disregarded after the first few days, since the peritonisation of all raw surfaces at the close of operation is followed (in the absence of peritoneal infections) by clean and immediate healing. This is observed at autopsies held two or three days after operation, and in such cases even the sutures may become invisible, and only a smooth extent of peritoneal surface covers what was the operation field. But in the case of the parietal wound mere primary union is insufficient—the important matter is the strength of the cicatrix. It must be strong enough to resist, without stretching, the pull of the muscles of the abdominal wall, and the tension implied by the term "intra-abdominal pressure." The capacity of the vertical median incision to do this is very doubtful, since in the earlier stages of its existence it is a mere inset of young fibrous tissue that solders together the two halves of the musculo-aponeurotic wall. It was of such a cicatrix that Treves wrote in 1887: "To prevent a hernia the patient should not be allowed to get up too soon. A month in bed is not an unreasonable time. She should not get up until the wound is sound." The advice must still be borne in mind, even for a wound sutured layer by layer, and I should feel inclined to follow it for a full three weeks in the case of the vertical median cicatrix.

On the other hand, when the abdomen is opened by the method of Lennander or by such an incision as that of Pfannenstiel, from the time that the wound has been sutured the abdominal wall is to all intents and purposes as sound as ever, particularly if the posterior fascial layer and peritoneum have been incised well behind one or other rectus abdominis muscle, instead of along the linea alba. In the resultant cicatrix the rectus muscle supports and protects from pressure, the only weakened lines in the fasciae, as is sometimes demonstrated when a patient strains at the closing stage of the operation. Experience of the Lennander and Pfannenstiel methods during the past nine or ten years has shown that in cases aseptic at the outset, it is superfluous to regard the recency of the wound and the immaturity of the cicatrix as offering any impediment to early rising. The principle underlying both methods is a simple one—the continuity of the cicatrix is interrupted by a supporting layer of intact muscular tissue. In short, the abdominal wall after operation is in precisely the same state as it was before, and if anything stronger, for in a number of instances in which from one to eight years after
the first laparotomy some further operative measure has been required, and access to the peritoneal cavity has been obtained by following the path originally pursued, the parietes have been found normal in all respects, except for thickening of the fasciae along the lines of former division, and for some adhesion of the rectus to its sheath.

I almost invariably employ Pfannenstiel's transverse incision, whether the object of operation be a simple fixation of the uterus or a Cæsarean section. In suturing the wound iodized catgut is used throughout, including the subcuticular suture which brings the skin edges into apposition. When a wound so closed is inspected on the third day the skin edges are found well united, and when the patient causes contraction of her recti abdominis by raising the head and shoulders slightly, the whole length of the transverse cicatrix is seen or felt to be supported by those muscles. Under such conditions no hesitation is felt in allowing the patient to leave her bed. Observation has shown that the catgut persists for a week or ten days, and I doubt whether its persistence for even a week is a matter of moment, since the union that has occurred during the first few days is sufficient, with the support of the recti, to render the cicatrix equal to ordinary strains put upon it. It should be mentioned that the dressing consists of sterile gauze secured in place by a broad strip of adhesive plaster, and no doubt the pressure of the latter may be accounted of use, although in my own opinion it is superfluous, and as good results would follow the use of a simple collodion dressing.

From July 1909 up to the present time (October 1911) the following figures are available:—

Total number of patients who underwent major operations 460
Total deaths ...................................... 11

Leaving for consideration ............................................ 449

Prior to the date mentioned, twenty days was probably the average duration of the stay in bed. For practical purposes half the number is taken as a convenient limit, and patients getting up on and within that number (ten) are dealt with as "early risers."

Out of the 449 cases, 283 left their beds as soon as they felt disposed to do so, and were granted the necessary permission. Of these 283, 263 were laparotomies, and 20 vaginal coeliotomies.

<table>
<thead>
<tr>
<th>Day of rising</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laparotomies</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>23</td>
<td>112</td>
<td>50</td>
<td>31</td>
<td>21 = 263</td>
</tr>
<tr>
<td>Vaginal coeliotomies</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>3 = 20</td>
</tr>
</tbody>
</table>
This table shows that in both sets of operations the seventh day was the most popular; prior to that day only 39 abdominals and 3 vaginals left their beds, and after it 102 abdominals and 9 vaginals.

The cases include instances of all the usual gynaecological conditions, from simple ventrifixations to extensive dissections for cancer of the cervix. Of the two who got up on the third day, one (an appendage case) was a hardy young woman, who immediately walked about the ward as though nothing had happened within her abdomen; the second was an elderly woman, who suffered from severe bronchitis, and who was on this account turned out of bed into an armchair, with great benefit in all respects. Among the risers on the sixth day may be mentioned a patient who had undergone subtotal abdominal hysterectomy for fibroids and cholecystotomy for coincident gall-stones.

Results. In the majority of cases not only were there no untoward results, but the general conditions showed an improvement, especially as regards muscular power. Appetites were improved and patients themselves picked up more rapidly than they did when confined to bed for three weeks or more. So far as can be gathered there was no diminution in the supply of aperient medicine to the ward, but it must be borne in mind that although patients were allowed to move about the wards, they were leading to all intents a sedentary life, and, further, most of them suffered from constipation prior to admission.

On the other hand, there are a few unfavourable results to be recorded:—

One patient, aged 47, who had had an ovariotomy, arose on the 8th day; on the same evening her temperature was found to be raised. Another case of myomectomy for fibroids got up on the 7th day; she felt faint, and also developed slight pyrexia without evident cause. She was sent back to bed until the 11th day.

In two cases the skin around the wound became reddened and tender. Both were returned to bed. No suppuration occurred.

Another patient developed a similar condition, but it did not yield to treatment. Suspicions were aroused, and the patient was watched. She was speedily discovered surreptitiously rubbing the cicatrix, and when taxed with it admitted that she wished to prolong her stay in hospital. Her wish had to be gratified for suppuration did occur.

A patient who had undergone ventrifixation with perineorrhapy arose on the 9th day, but had to be returned to bed on account of secondary bleeding from the perineum. This has been the sole instance of haemorrhage.

An elderly woman (64) got up on the 6th day, and promptly developed bronchitis. An offset to this is the case in which transference to an armchair gave rapid relief to post-anæsthetic bronchitis.

The point which I regarded with much interest was the relation
Wallace: Early Rising after Cæliotomy

of post-operative phlebitis to early rising. It has been stated that this complication is lessened by getting patients up soon after operation, but in my list there have occurred three instances of it.

1. Patient aged 30. Left salpingectomy and ventrifixation. Got up on the 7th day: developed pain and slight tenderness in left calf: no swelling.

2. Patient aged 32. Ventrifixation and posterior section of cervix. Got up on 8th day, but on the 10th well-marked phlebitis of the left calf appeared. Delayed in hospital a month.


It is evident therefore that early rising does not prevent the occurrence of phlebitis, for three undoubted instances occurred out of 283 cases. This experience agrees with that of the Jena observer Franz, who found that out of 1,441 patients who left their beds after the first week, 30 developed thrombosis, and 13 embolism. Of 205 who arose during the first week none had thrombosis, but 3 suffered from embolism.

I have been so satisfied with the general results obtained that early rising has been established as the usual routine of the ward, and the question now is, not who shall rise early, but what cases are unfit to get up, since the former constitute the great majority. It should be stated that although a patient may leave bed on the 7th day, yet she does not leave hospital until the 15th at the earliest, and often not until the 17th or 18th day. Between those dates she is moving about the wards only, for there are not conveniences for out-of-door exercise. The sole exceptions are those of ventrifixation or other fixation operations; uncomplicated instances of these are now generally discharged on the 10th day, but in that case each one has been fitted with a Hodge pessary, which is removed at the end of a month. This method had been found to give results at least as good as those formerly obtained by keeping the patients in bed five weeks.

It may be urged that women of the hospital class are just the people who require a rest in bed, and no doubt many of them do—the main point is the duration of the rest. My belief is that the duration is best settled by the patient's own desires, and if she wants to get up at the end of the week it is better to let her do so—the spending of another week or ten days pottering about the ward for several hours each day is not any less a rest, whilst it offers change from the monotony of bed, and the advantage detailed at the beginning of this note. When a patient is disinclined to leave bed she is left alone until she wants to get up, so that the woman who really needs prolonged rest receives it—but such women in my experience form but a small majority.

This brief note is based solely on hospital cases, for in private practice a different kind of patient has to be dealt with. Many of
them gladly accept early rising, but very many are disinclined to get up a day sooner than did their friends and acquaintances who have also undergone laparotomies, the after-treatment of which was conducted on traditional lines. Moreover, in misfortune, sympathy is pleasant, but the situation is robbed of much of its romance when a patient who has undergone a simple ovariotomy for what appears to the lay mind a frightful abdominal tumour, a week later emerges from bed and receives her friends. On this matter, however, the lay mind can be educated until early rising becomes as much a matter of course as the primary healing of wounds.