

with. Accordingly, it is always the duty of the person who makes the dressings to examine the macintosh with the view of detecting any holes in it.

If the dressing is to be used as soon as it is made up, it is well to sponge the surface of the macintosh with 1-20 carbolic lotion before inserting it. The same piece of macintosh may be used for a whole case, or for more than one—so long, in fact, as it does not become worn into holes. Two pieces of macintosh are generally provided for each case, and a dressing is always made immediately after the case has been dressed, and is ready for application at any time.



FIG. 37.—DRESSING IN A CASE OF PSOAS ABSCESS OPENED ABOVE POUPART'S LIGAMENT.

To show the arrangement of the elastic bandage along the margins of the dressing.

It might happen that, in the movements of the patient, the edge of the dressing might become separated from the skin, and air pass into the space thus formed. To prevent this, the German surgeons as a rule pack in salicylic jute or wool beneath the edge of the dressing. This may serve the purpose, but it is by no means safe. Mr. Lister some time ago introduced the use of elastic webbing, which is of various breadths. It is better not to be too broad. It is put moderately on the stretch, and surrounds the edge of the dressing. Its general arrangement varies of course with the situation. It is not much used on the extremities, because the arm or leg is generally so

fixed by means of splints that there is no chance of separation of the dressing.

The operation and first dressing having now been completed, the question arises when the dressing should be changed. It is only extremely rarely that it is necessary to change it the same evening. The only cases in which this is usually done are large empyemata or very large abscesses, and cases of amputation at the hip-joint, where the discharge of bloody serum is profuse, and there is but little space for overlapping of the dressing.

As a rule, the dressing ought to be changed entirely on the following day, the deep part as well as the superficial. It is well to change the deep dressing in order to see that none of the stitches are too tight, and that the drains are acting properly. After the first day the deep dressing need not be touched, unless the patient is complaining of uneasiness, or unless the surgeon wishes to see the wound for the purpose of removing stitches or drain. If it is not necessary to disturb it, it may, especially where there is an organising blood-clot, be better not to do so, for that would only be to expose the wound unnecessarily to the irritation of the carbolic acid. If the deep dressing is not changed, great care must be taken to have an efficient spray playing over the part.

In changing the dressing the spray is used, and also 1-40 carbolic lotion, in which a piece of loose gauze and protective are put before the dressing is begun. The elastic bandage is first removed, and then the patient or an assistant places his hand over the centre of the dressing while the bandage is being cut, so as to prevent the dressing being lifted up and air pumped in. Then the surgeon, having purified his fingers, and having turned on the spray, lifts the edge of the dressing carefully, taking care that the spray passes into the angle between the dressing and the skin (see Fig. 38). Having removed the superficial dressing, he again dips his fingers, and then removes the deeper parts and exposes the wound.

If nothing is wrong, he immediately applies fresh protective and wet gauze, and then washes the parts round about, as far as the discharge has extended, with 1-40 carbolic lotion. The

BIBLIOTHECA
FAC. DE MED. UAMA

edge of the wound is not washed or exposed to the action of the spray longer than is absolutely necessary. It is well to apply the deep dressing at once, for in washing the surrounding parts, one is apt to give the wound a final touch with the rag. Now this rag may contain some gross particles of putrid material (such as a crust of discharge from the exterior of the dressing, fæces, &c.), and thus putrefaction would be communicated to the wound. There is no necessity for cleansing the edges of the wound. Dirt, so long as it is clean, *i.e.*, so long as it does not contain causes of putrefaction, does no harm; indeed, it rather aids the action of the protective; while

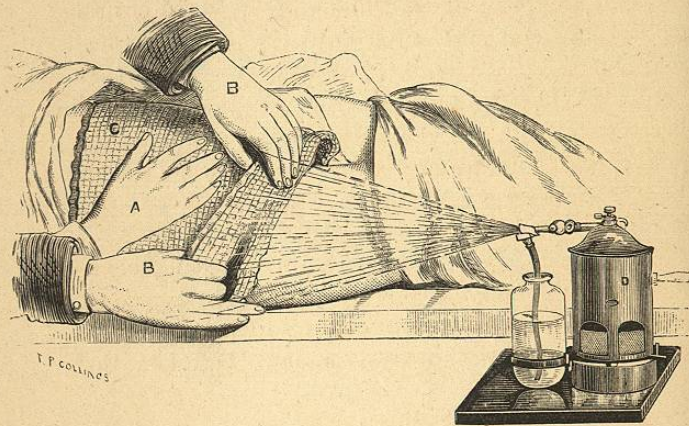


FIG. 38.—METHOD OF CHANGING A PSOAS ABSCESS DRESSING.

A, Hand of patient holding down the dressing over the wound. B B, Hands of surgeon lifting the lower edge of the dressing (C). D, The spray machine so placed that the spray passes in beneath the dressing as it is lifted.

to rub it away is to irritate and injure the healing edge—to produce a state of unrest. A fresh dressing is applied as before described.

Where there are two wounds in different situations, so placed that the spray cannot command both, each must be dressed separately, care being taken not to uncover the one till the other is at any rate protected by a deep dressing. The patient or assistant must keep his hand on the dressing over the one wound, while the other wound is being attended to.

The next dressing takes place on the following day at visit,

if there is any discharge at the edge of the dressing or if the wound feels uneasy. If there is no discharge on the drawsheet and if the wound is free from pain, the dressing is not changed; and even though discharge should appear a few hours later, the dressing is not changed till next day at visit hour. The rule for changing the dressings is therefore: Change if discharge is through at the visit hour, or if there be any other reason for it; if not, leave the dressing till next day at visit, and then follow the same rule.

Never leave a dressing unchanged longer than a week. By that time most of the carbolic acid has passed off by evaporation; and therefore, if the discharge once came to the edge, putrefaction could spread inwards with great rapidity. And it would not be necessary for the discharge to appear at the edge in order to have putrefaction of the wound, for the sweat collecting beneath the dressing permits the multiplication of septic particles in it, and thus they may reach the wound. Where a dressing is to be left on for a week, it is well to use the salicylic cream in the way before described.

Such is the general method of using carbolic dressings; special modifications will be noticed presently. Let me pass on in the meantime to the general points as to boracic dressings.

Let us suppose that a patient is admitted with a foul ulcer of the leg: how is he to be treated? If he were to be treated with carbolic dressings, the ulcer would very probably remain foul, or even though it ultimately became free from odour, it would heal excessively slowly. Hence, Mr. Lister first purifies the sore, and then dresses it with boracic acid.

To purify the sore, chloride of zinc, 40 grs. to the ounce of water, may be used. This is applied thoroughly to the whole surface of the sore, and at the same time the surrounding skin is well purified by thoroughly washing it with 1-20 carbolic lotion, which is employed on account of its special power of penetrating the epidermis. When this has been done, a piece of protective, dipped in boracic lotion and slightly larger than the sore, is applied over it, and outside this is placed one or two layers of moist or dry (it does not much matter which)

BIBLIOTHECA
FAC. DE MED. U. A. M. B.

boracic lint, of sufficient size to cover the protective well in all directions. There is the same objection here to allowing the protective to project beyond the edge of the dressing as in the case of the carbolic dressings. Lately, instead of applying the chloride of zinc solution, which causes considerable uneasiness, iodoform has been powdered over the whole surface of the ulcer, and it has been equally successful. The chloride of zinc or the iodoform need only be applied once; but should putrefaction not be eradicated, the application is repeated.

This dressing is changed next day, but afterwards, as a rule, it only requires to be changed every two or three days, or indeed at longer intervals, provided that there is not much discharge. That is to say, as there is a very large store of the antiseptic in the lint, and as it is but slightly soluble at the temperature of the human body, the discharge may go through the dressing many times without washing out all the antiseptic. At the same time it is found as a general rule that the wound heals most rapidly when the dressing is changed once in three or four days.

At the changing of the dressing no spray is required. The bandage (which may be a common cotton bandage, if preferred) having been removed, the dressing is taken off and the wound well washed with boracic lotion. Any septic dust which falls on the wound during its exposure is destroyed by giving the wound a final wash with the lotion before applying a fresh piece of protective and boracic lint.

This boracic dressing is not used for wounds which are not quite superficial, because the acid is not volatile, and because it is but a feeble antiseptic; but when once a wound has become quite superficial, it will heal more quickly if treated with boracic dressing.

In some cases, more especially where the sore is septic, or where the patient dresses it himself, boracic ointment is preferable to protective, and where the sore is healing, the half-strength ointment is the best. Outside the ointment a piece of boracic lint is applied as usual. Of late, salicylic ointment has been used, and found to answer, as a rule, better than the boracic. It is less irritating, and permits healing more readily.

A eucalyptus ointment has been employed quite recently, and has given excellent results.

When the effects of a poultice are wanted along with an antiseptic effect, the boracic lint is applied like water dressing. A suitable piece of the lint moistened in boracic lotion is applied, and outside this a larger piece of macintosh or gutta-percha, overlapping the lint in all directions.

BIBLIOTHECA
FAC. DE MED. U. S. P. A.