

antiseptic lotion; this method, if properly applied, is very efficient. The plugs, however, must be carefully inserted, one after another; the first one should be placed within the cervix itself, and then the others in rotation till the vagina is perfectly full. The plugs may be made of clean strips of cotton or wool, previously soaked in some antiseptic solution. On no occasion should a sponge be used which has been in use in the house for other purposes. After the vagina has been carefully packed, a firm pad should be placed over the uterus, and the whole kept in position by a carefully applied bandage. The tampons should not be left in longer than six or eight hours, and when removed the vagina should again be syringed out.

Lastly, if on removal of the plugs the os be found sufficiently dilated to perform version, and the woman herself be in a fit state for the operation, it should be done. The bipolar method being used, if possible, the leg of the child when brought down will both form an efficient plug and further assist in dilating the cervix. The operation of version by the bipolar method may be undertaken at any time in the course of the treatment whenever the cervix will permit of it.

In Berlin it is claimed that by this method of treatment the mortality has been reduced to four and one-half per cent. of women and sixty per cent. of children,—a marvellous reduction as compared with what it used to be.—*Ther. Gazette.*

### SKIN-GRAFTING OF STUMP AFTER AMPUTATION.

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The case upon which I will operate is one that requires skin-grafting in order to cover a large, granulating surface on the arm. It is an interesting one, because it illustrates the best method of treatment in a good many cases of traumatic surgery. By means of it we can often save large portions of tissue, which, treated according to ordinary principles, would surely be sacrificed. Take, for instance, a case of compound fracture of the thigh, with extensive laceration of the bone and soft parts. The injury was inflicted perhaps in a railroad accident, or by heavy machinery; the wound is filled with coal dust or filth, and the patient is brought to the hospital in a state of profound shock. Formerly, the approved method of treating such a case was to get rid of all the septic material by performing an immediate amputation above the wound. One serious objection to this is that, as these patients are usually suffering from shock and hemorrhage, an immediate and prolonged operation often proves fatal. The way in which we have treated quite a number of such cases here,

among them the one upon which I am about to perform skin-grafting, is as follows: If there are any bleeding vessels, they should be secured at once; then, with the scissors, any shreds about the stump are snipped off, and the whole area cleansed as thoroughly as possible. The wound is left wide open—not a single stitch being put in—and dressed with sterile gauze, just as though you were dealing with a clean wound and expected primary union. All this can be done within ten or fifteen minutes, and without the aid of an anæsthetic. These wounds, no matter how dirty they are, if thoroughly cleansed and kept wide open, do very well indeed. Perhaps, at the end of a month or two—or as soon as the patient has recovered from the effects of the injury—an amputation can be performed, if necessary.

This patient, about six weeks ago, had his left arm caught in a cog-wheel, producing great destruction of the tissues, and almost severing the forearm about three inches below the elbow joint. The wound was treated very much in accordance with the principles above laid down, and we now have, as you see, a fairly good stump, with an extensive granulating surface extending almost up to the elbow joint. The question now arises whether it is better to remove this stump, or make an attempt to preserve it by skin-grafting. Even such a small portion of the forearm as this is of enormous value, while if we amputate at or above the elbow, the left arm will be practically useless. The best method of skin-grafting is that of Thiersch, which I have shown you here a number of times. One point in connection with this operation is the absolute necessity of complete asepsis. Both the wound for which the grafts are intended, and the surface from which they are taken, should be carefully prepared; in cleansing these surfaces, we employ warm normal salt solution, not strong antiseptics, which are apt to produce necrosis of the tissues and prevent healing. When we have a granulating surface to deal with, the question comes up, shall we put the grafts directly on the granulations, or first produce a raw surface with the knife or curette? The latter plan, I think, gives the best results, and in granulating ulcers of long standing it is advisable to first excise the ulcer, making an entirely fresh surface.

Before scraping this wound with the curette, I shall apply the Esmarch bandage. The statement has been made that in making skin-grafts on the extremities, the use of the Esmarch is contra-indicated, the writer claiming that it cuts off the blood supply from the surface, and thus interferes with the growth of the grafts. I do not agree with this statement. We have tried both methods here, and I do not think that the use of the bandage interferes at all