

absorption, and arrest the formation of pus. If it comes to abscess other measures will have to be used, such as forcing poultices, &c., and then we get into very distressful troubles, and it becomes a Surgical case, and happy is the woman who falls into skilful hands. You will have to follow all your Medical directions, but this is not the place to enter into Surgical details.

There is one point that I think is now generally agreed to by most accoucheurs—that *when inevitable* the lancing should not be too long delayed. The sooner, consistently with other conditions, the pus is liberated the better for the patient; it does not do to trust too long for the abscess to break. Some patients resist Surgical aid to the very last, as it were. As a Nurse it is your duty in every way to support the opinion of the Doctor on this point, for her siding with the patient has led to *serious* loss of time. Use all your powers of persuasion with gentlest tact to induce the lady to submit sooner rather than later to lancing.

We have been so long occupied in discussing the topical measures necessary in breast treatment, that we have had no time for other Nursing duties connected with lactation. In our next paper we shall have to retrace our steps, and take up our duties from about the fourth day from delivery, where we left them in a former paper. (To be continued.)

PRACTICAL LESSONS IN ELECTROTHERAPEUTICS.

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(Continued from page 246.)

LESSON VII.

Rheophores—Covered Electrodes for Medical Purposes; Plate and Handle; Standard Sizes and Areas; Bare Electrodes for Surgical Purposes.

WE have now considered the generation and transformation of electricity, and its control and measurement, so that before proceeding to describe its effect upon the body, and the various methods of application, we have only to deal with the conducting media called electrodes, which are used to communicate the electricity to the body by direct contact, and the wires or other conductors called rheophores, which connect them to the battery.

The rheophores may be simple wires of conducting metal, but are more often stranded cord or braid, having fine copper wire closely woven in

with the cotton so as to be very flexible. All rheophores should be *well insulated*, for otherwise they may cause shocks to be received by the patient through accidental contact, or they may short circuit the battery through accidentally touching one another.

Electrodes vary much in size, shape and material, according to the form of application they are required for. We will consider them in two classes, viz. :—(A) Covered electrodes for medical purposes; (B) Bare electrodes for surgical purposes.

(A) The general requirements for these are :—(1) Good conductivity; (2) Firm pliability, so as to make complete surface contact with the whole area of the skin covered; (3) Compactness, so as not to occupy unnecessary space; (4) Good insulation for such part as has to be handled by the operator; and (5) general handiness and cleanliness.

(1) Any good conducting metal will fulfil this condition, but it is necessary to remember that, except under very special circumstances (to be hereafter referred to), the metal must not be allowed to come in direct contact with the skin of the patient. Electrodes are, therefore, covered with some soft material, such as flannel or chamois leather, by way of padding. These covers, when dry, are very bad conductors; but when moistened with water, or better still with salt and water, become good conductors.

(2) This condition is, perhaps, best illustrated by reference to the human hand, which is so pliable that it can easily form itself to the shape of any surface it is required to rest upon, while at the same time it is firm enough to retain its form under pressure. Of course, no mechanical electrode can equal the human hand in this respect, but it is easy to see that the condition may be fairly well fulfilled without the use of any elaborate or costly construction. Thick slabs of metal are too rigid, and thin strips of metal foil too flexible.

(3) By compactness we mean that the parts of the electrode which form the handle, or the means of attachment to the body of the patient, as the case may be, and the terminal for connection with the rheophore shall be as small and unobtrusive as are compatible with utility. This is specially necessary with electrodes which have to be passed beneath the clothing of a patient.

(4) The handle, of whatever shape and material it may be, must be well insulated, so that the operator may not receive any of the current intended for the patient. When the insulation of a handle becomes damaged, so as to promote electrical leakage, it should not be used further till it is repaired.

(5) By general handiness we mean the shape

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