THE NURSING AND MIDWIFERY CONFERENCE.

MASSAGE.

Ionic Medication.

At the second afternoon session on Wednesday, April 23rd, the subject discussed at the Nursing and Midwifery Conference was massage.

Dr. J. S. Mackintosh spoke of Ionic Medication, or Ionization, the principle of which is the introduction of remedial agents directly into the affected parts instead of swallowing them in the hope of a portion of the medicament lighting on the diseased tissue by the labyrinthine route of the circulation.

The speaker said that this idea of driving the drug direct into the site of the disease was a fascinating one. We knew, for instance, that the salicylates had a curative action on rheumatic and allied affections, but we knew also that when taken by mouth this group of drugs had incidentally an irritant action on the gastro-intestinal tract, and a depressing action on the nervous system, and further in a not inconsiderable proportion of patients salicylates produced definitely toxic symptoms in quite ordinary doses of ten or even five grains. If, therefore, salicylic acid could be introduced direct into a back afflicted with lumbago or into a rheumatic joint, so as to exercise its specific action without the drug becoming diffused all over the body, we had obviously got a very useful new method of treatment. The question would no doubt arise in some minds: "Could not the same results be obtained by injection with a hypodermic syringe?" The answer was that with the syringe the drug was simply injected into the interstital tissues when it would be absorbed into the general circulation, as was seen with strychnine and morphine, whereas in ionization the drug tended to be carried into the very substance of the cells of the tissues through which the current was passing, and remained there to exert its specific action, though there might be some small degree of diffusion into the circulation.

The lecturer then described in detail the method of applying the treatment. As regards the theory, he explained briefly that when an electric current was passed through, for example, a solution of iodide of potassium, the molecules of this salt would be split up into particles charged respectively with negative and positive electricity, which would be attracted to the poles of character opposite to themselves, *i.e.*, positively charged particles to the negative pole, negatively charged particles to the positive pole.

Radium Treatment.

Dr. R. W. A. Salmond, who presented the paper on "Radium Treatment," reminded his hearers that Radium was discovered by Madame Curie and the late Professor Curie in 1900. He deprecated it being regarded as a specific for cancer, or the elixir of youth, but showed that in certain conditions it acted better than anything we have at present.

Dr. Salmond explained that radium was constantly giving off certain rays which had the power of penetrating opaque bodies. These rays were of varying penetrating power, and their effects at various penetrations were different. To obtain varying proportions screens of aluminium, silver, lead or platinum were interposed between the radium and the part to be treated. It was important to remember that these metal screens should have some material, such as rubber or paper between them and the patient, as they gave off secondary rays induced by the radium. The question of filtration was one of the most important in radium therapy and could only be settled by experience.

The usual method of applying radium was for it to be enclosed in a small metal tube usually covered when in use by rubber tubing, fixed by adhesive plaster, or a bandage, to the part to be treated, or inserted surgically into the centre of a tumour. The surrounding healthy parts were protected from the action of the rays by a sheet of lead laid over the part, with a window cut in it, over which the radium was applied.

A bit of practical advice was never to throw away the dressings in which the radium had been enclosed before finding the radium itself, or a small tube containing this precious substance might be thrown away by mistake.

The Cross-Fire Method.

Radium was sometimes applied by what is known as the cross-fire method, when two or more tubes were placed at opposite sides of a tumour so that the tissues were bombarded in opposite directions.

Another method was to incorporate the radium in a film of varnish fixed on a metal holder and placed over the part. Some aseptic waterproof material should be interposed between the varnish and the affected part, or moisture from the patient might spoil the varnish.

Radium emanations could be collected by a special apparatus and enclosed in glass tubes or metal boxes. The emanation could be inhaled or, after absorption by petroleum, saline, and other liquids, be given by the mouth or subcutaneous injections, but it must be remembered that the radio-activity of this separated gas became weaker and weaker. The lecturer gave a very necessary warning to his hearers not to handle radium with uncovered hands or dermatitis might be set up. Radium treatment seemed to act better when the patients were kept in bed. He insisted that the rôle of radium in malignant disease was not to replace the knife, but to act in co-operation with it; *i.e.*, by its application to a wound after operation, or by the alleviation of pain, &c., in cases too far advanced for hope of cure by surgical means.

previous page next page