

for twenty-four or thirty-six hours, and is then squeezed through a cloth, so as to get as much liquid out as possible. Of this, 2 c.cm., corresponding to about half a gland, may be given at a dose. If used for hypodermic injection, to a dram (4.) of the glycerin-extract is added half a dram (2.) of a 1 per cent. solution of carbolic acid in distilled water, of which mixture from 10 to 15 minims (0.62-1.) may be injected three or four times a week.

Dosage.—Of the glycerin-extract one may begin with $\mathfrak{m}\text{v}$ (0.31) three times a day, increasing to $\mathfrak{M}\text{xv}$ or $\mathfrak{M}\text{xx}$ (1.-1.23). In cases of infantile myxedema, it is well to begin with $\mathfrak{m}\text{j}$ or $\mathfrak{m}\text{ij}$ (0.062-0.12) three times a day, and gradually increase until $\mathfrak{M}\text{x}$ or $\mathfrak{M}\text{xij}$ (0.62-0.74) are taken. Of the powdered gland one can begin with from gr. ij to gr. v (0.19-0.32) three times a day.

Murray divides the treatment of cases into two stages—first, the removal of the symptoms of the disease; and secondly, the maintenance of the healthy condition. In the first stage it is well to begin tentatively with small doses, and gradually increase them. The symptoms of too rapid introduction of the remedy are flushing of the face, gastric irritation, and in a few instances vertigo, fainting, and in some cases epileptiform convulsions. Rapid and feeble heart-action, with profuse perspiration, has also been noted. It is well, however, not to suggest to the patient the probable effect of the remedy, as these untoward symptoms are in reality rare. The good effects are usually noticed within two or three weeks, and in some cases within a month the change has been remarkable. These effects are seen in the gradual reduction of the swelling and the loss in weight; one patient of mine lost twenty-five pounds in twenty-five days. The hair begins to grow, the temperature increases slightly, reaching normal, and the mental processes become more active.

In cases of infantile myxedema—congenital cretinism—the changes are usually remarkable, and some of the illustrations given by Bramwell, Raillton, and others, showing the results of a few months' treatment, are truly astonishing. In a case under my care there occurred in the course of fourteen months an entire loss of the cretinoid aspect; the color became good, the nutrition greatly improved, and the flesh became firm and solid; the patient developed rapidly and increased four inches in height. Previously not able to walk, she now ran and walked about everywhere. Finally, the mental development was extraordinary. At the beginning, though she could try to say a few words, her vocabulary was confined to "mamma" and "papa." After fourteen months she talked clearly and said almost everything.

When the normal condition has been reached, the treatment must still be continued. The amount of the gland used may be diminished, but if the treatment is interrupted the symptoms are likely to recur. The treatment has not been long enough in use to speak positively as to whether the use of the extract can ultimately be abandoned. It all probability it has to be used continuously. In cases that have resulted from surgical extirpation of the gland the same beneficial results have followed the administration of thyroid extract.