

Nasal diphtheria requires the large dose in almost every case, and it is better to start with a dose and a half or a double dose, according to the age of the patient.

The second dose—this should only occasionally be necessary, and is then due to a misconception, although inevitable, of the amount of toxin absorbed.

The necessity of a second dose cannot be determined by any one symptom, such as the temperature, although this is the most reliable. The general condition of the patient, the amount of depression, the subjective and objective symptoms of the local lesion, must all be taken into account.

Roux advises that when the temperature rises above $100\frac{1}{2}^{\circ}$ a second dose should be given. In many cases this temperature, or even a higher one, on the day after the administration of the antitoxin is due to the absorption of septic poison, and therefore will not be influenced by diphtheria antitoxin. Again, in other cases the local inflammation will be active, while the temperature may never be above $99\frac{1}{2}^{\circ}$ or 100° .

When a second dose is given it should be nearly, if not quite, as large as the one previously given, as this will insure against almost all possibility of the case requiring a third dose. In only 3 of the 103 cases was a third dose administered, and in two of these there followed a suspicious desquamation, leading to the belief that a mild scarlatina might have been complicating the diphtheria.

The immediate effects of the antitoxin are varied.

Upon the temperature: In the majority of cases there is a reactionary rise beginning in from one to two hours and lasting four to ten, the temperature rising from $\frac{2}{3}^{\circ}$ to 3° . The amount of reaction seems to bear no relation to age, to the severity of the disease, or to the height of the original fever. In many cases there is no reaction whatever, the temperature gradually falling, and in a few cases there has been a sudden and decided drop.

After the reaction has spent itself the temperature begins to fall, and in ten to twelve hours may have reached normal. If the amount of antitoxin given is quite sufficient for the case the temperature chart will then exhibit slight evening exacerbations for one or two days, followed by a normal course. If the dose is not sufficient the temperature will either not fall at all, or after the reaction will fall to about the height of the original fever, or after having fallen to or nearly to normal will gradually again rise to a considerable extent.

It is on the heart's action that the most varied effects are seen. In the majority of cases the pulse is unaffected, in many it is depressed,