

Therapeutic Indications.—The therapeutic indications and contra-indications which these physiological phenomena point to, are obvious. Hydrate of chloral may be given so as to produce sleep, diminish sensibility, allay irritation, slow the heart, relax muscular tissue, lower animal temperature, devitalize the blood, cause anæsthesia and destroy life. Part of these phenomena have a therapeutic value, and part are toxic. They may be arranged in two groups, thus:—

Therapeutic Group.	Toxic Group.
Sleep. Diminished sensibility. Diminished irritation. Muscular relaxation. Contraction of arterioles.	Slow or irregular pulse. Complete Anæsthesia. Altered blood globules. Great diminution of temperature. Great muscular relaxation. Death.

In the administration of chloral, the practitioner of course desires to obtain the therapeutic and avoid the toxic phenomena. This can easily be done by a proper attention to the purity of the article and to the mode of its administration. The indications to produce sleep, diminish sensibility and allay irritation, occur very often in the treatment of disease. Hence it is not surprising that chloral has been tried clinically in a great variety of diseases.

The *contra-indications* to the use of the hydrate of chloral have not yet been fully ascertained. Its physiological action on the heart is such as to render one very cautious about administering it in cardiac affections. The experiments of Dr. Hammond show that it is not safe to prescribe it in all forms of disease of the head. Organic diseases of the heart, congestion of the brain, meningitis, and very probably cerebral anæmia, contra-indicate its use.

The average dose for an adult is 30 grs. A decided hypnotic effect is produced in some impressible individuals by 15 grs. It is not safe to exceed the dose of 60 grs. in the course of ten or twelve hours. I have noticed that 30 grs., given in two doses of 15 grs. each, half or quarter of an hour apart, will produce less gastric uneasiness and greater hypnotic action than when given in a single dose. Theoretically, in consequence of the rapid elimination of the chloroform evolved from the chloral in the blood, such should be the case. It may be administered