

the skin. The albumins of the transudate are the same as those of the blood-plasma, namely, serum albumin, serum globulin, and fibrinogen. Concerning their ratio to one another and to the quantity present in blood-plasma, little is known. The quantity of saline constituents in the transudate is pretty nearly the same as that in the blood-plasma, but varies slightly. Not rarely it surpasses that of the blood-plasma in the same person. All transudates contain such other non-colloid bodies as are in solution in the blood, bodies which never pass out in pure glandular secretions, such as biliary coloring matter and hæmoglobin. Substances not preformed in the blood are not found in any transudate, unless the latter has become decomposed. Tissues which produce transudates lack the specific powers of gland cells. Filtration experiments performed outside the living body are not decisive with regard to the influence of blood-pressure upon transudation. Rise in venous pressure effects increase of the quantity of the transudate and of its contained albumins, while the amount of its saline constituents is not materially changed. Rise in arterial pressure (*i.e.*, active hyperæmia) appears in the same manner to increase transudation. Nothing definite is known concerning the quantity of albumin in transudates occurring in simple arterial hyperæmia. Section of the sympathetic nerve seems to increase the quantity of albumin in the area of transudation. The quantity of saline constituents in the transudate is not materially changed in arterial hyperæmia.

#### THERAPEUTICS.

##### Some Recent Contributions to the Study of Antipyrin.

We extract the following from the *Medical Analectic*:—"Chouppe, we believe, first asserted that antipyrin was capable of relieving uterine pains after parturition or dysmenorrhœa. In *Le Praticien* for March, 1888, Queirel, of Marseilles, announces that he employs hypodermic injections of five grains of antipyrin, during labor. The medicine acts in twenty-five minutes, and relieves or diminishes the pain without interfering in any way with the labor.

Laget (quoted in *Therapeutic Gazette*, March 15, 1888), in a case where severe labor pains came on in the fifth month of pregnancy, prescribed an enema containing about 30 grains of antipyrin,

with the result of relieving the pains slightly. An hour later a similar dose was given, which relieved the pains to a great extent. The uterine contractions continued, however, and in three hours the fœtus was expelled. The patient had no after-pains, and convalesced normally.

Netter testifies also to the fact that antipyrin relieves the pain, but does not diminish the force, of uterine contractions.

In the *Lyon Medical*, of Feb. 19, 1888, Dr. Mollière draws some unfavorable comparisons between the results of the treatment of typhoid fever by cold bathing and antipyrin. In eighty-five unselected cases treated by the cold bath, there were nine deaths, constituting a mortality of 10.5 per cent. Twenty-seven light cases treated by ordinary hydro-therapeutic methods gave a mortality of 7.4 per cent. In fourteen cases, of which four were of the lightest variety, antipyrin alone was used, with a mortality of 14.2 per cent. Throwing out the four light cases, which would have recovered under any treatment, the mortality is raised to 20 per cent.

The author maintains that antipyrin, even in moderate doses, produces toxic effects, which should continually be watched for. He has often seen icterus, stupor, and the characteristic eruption, follow its administration, and other symptoms resembling those produced by carbolic acid, which has been justly discarded in the treatment of typhoid fever. He holds the remedy responsible for death in two of his cases.

Dr. L. C. Armstrong, of Taylorville, Ill., has seen alarming collapse follow the administration of 20 grains of antipyrin in a case of puerperal fever. The patient, however, soon responded to stimulants and atropin.

Barr (*Lancet*, Feb 25, 1885; *Medical News*, April 7, 1888) reports a case of collapse and death following the ingestion of from 15 to 30 grains of antipyrin in two doses. It was a case of puerperal fever, in which the antipyrin produced a fall in the temperature of about six degrees, with vomiting and diarrhœa. Rigors now came on, the extremities became livid, and in thirty-two hours the patient died in syncope. At the autopsy the spleen was found contracted and kidneys shrunken, containing infarctions.

According to See, *L'Union Medicale*, Feb. 16 1888, toxic effects following the administration of