

# SUMMARY OF THE THERAPEUTICS OF THE YEAR 1897-98,

CHIEFLY WITH REFERENCE TO NEW REMEDIES.

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IN the following pages the principal advances during 1898 have been summarised. Attention has been mainly directed to recent work in connection with the newer remedies, but where discussions embrace both old and new an attempt has been made to represent both views, rather than to appear to discredit remedies of established reputation by giving an undue prominence to the more recent arrivals. As in former years, a short account has been given of toxic symptoms observed with older remedies, together with their treatment, while in the section dealing with new remedies I have included the results of more extended experience of drugs of recent introduction, as well as notices of experimental researches, calculated to influence the therapeutics of the future.

## A.—TOXIC EFFECTS WITH OLDER REMEDIES.

### 1. Hydrocyanic acid as an antidote to chloroform.

This remedy has been recommended by Hobday (*Lancet*, Jan. 1, 1898). In 1896 he gave an account of the palliative and sedative effects produced on the respiratory efforts by chloroform inhalations, administered to animals suffering from overdoses of hydrocyanic acid, and now he endeavours to show that the antidotal use may be reversed, and he states that when chloroforming animals the only antidotes he now employs are hydrocyanic acid and strong liquor ammonia. Should the breathing cease or become dangerous, artificial respiration is resorted to, the tongue being continuously pulled well forward and the full medicinal dose of Scheele's acid placed as rapidly as possible at the back of the throat. When respiration has recommenced, the ammonia vapour is applied cautiously to the nostrils. He considers that hydrocyanic

acid is of value as a rapid and powerful respiratory stimulant, and he thinks that it is not more dangerous than strychnine. His results are necessarily drawn solely from veterinary practice. In the two cases of which details are given he used, respectively, three minims and four minims of Scheele's acid. It must be remembered that Scheele's acid may be rather more than twice the strength of the pharmacopoeial dilute hydrocyanic acid. It is noteworthy that hydrocyanic acid is generally considered as being capable of paralysing the respiratory centre, instead of acting as a respiratory stimulant, and shortly after Hobday's account was published he was challenged to give an account of the effects on a healthy animal of the dose he recommended (*Lancet*, Jan. 8, 1898).

### 2. Anæsthetic emergencies.

The treatment of emergencies under anæsthetics was somewhat fully discussed at a meeting of the Society of Anæsthetists (*Lancet*, Feb. 5, 1898), and the employment of various drugs, such as amyl nitrite, strychnine, atropine, etc., came under consideration. It was indicated that the subcutaneous injection of drugs might be inoperative, since, for their absorption, some degree of circulatory activity was necessary, while it is difficult to estimate whether a given dose administered to a person apparently moribund might not, upon his restoration, set up toxic symptoms of its own. Many speakers referred to the value of ammonia and of oxygen in the treatment of chloroform poisoning, but the recommendation to employ hydrocyanic acid did not meet with general approval.

### 3. Cannabis indica in large dose.

Bicknel (*Therap. Gaz.*, Jan., 1898), wishing to test the effects of cannabis indica, having previously taken 5 gr. of an extract made by an American house, took, in a single dose, 3 gr. of an English extract, and he has recorded his experiences under this dose. In many respects the symptoms produced resemble those in H. C. Wood's classic account. The sense of duration of time became altered, and visions of a vivid character were very numerous. The chief difference, however, consisted in the existence of muscular contractions, followed later by violent convulsive movements, due evidently to the action of the drug on the spinal cord. He also describes a sense of extreme tension in the abdominal blood-vessels. It is curious, however, to note that there was no foreboding or fear of impending death, although the condition remained severe for more than five hours, and during part of the time there was unconsciousness. The unconsciousness was succeeded by sleep, which continued eight hours, and on waking all symptoms had passed away.

**4. Rapid development of belladonna poisoning from the use of sulphate of atropine eye-drops.** (*See also p. 433.*)

(*Lancet*, Jan. 8, 1898.) The patient had been ordered eye-drops, 4 gr. of sulphate of atropine to 1 oz. of distilled water, 2 drops to be used every four hours. The day after using the drops she had dryness of the tongue, lips, mouth, and throat, and great craving for drink, and the pupils were widely dilated. She also suffered from some oppression of the heart and giddiness, which was increased after taking food. Cases of extreme susceptibility to the action of belladonna are by no means rare. In this particular case, however, the curious feature is the rapidity with which the symptoms developed after the absorption of the drug from the conjunctiva.

**5. Salicylate of cinchonidine** has frequently been employed as a tonic and antiperiodic in neuralgia, rheumatism, sciatica, etc., and it has ordinarily been administered in doses of 5 gr. every two hours. Walcott, of Massachusetts, records a case of untoward effects, resulting from the use of 10 gr. of this drug, ordered in a single dose. The patient had been suffering from neuritis, affecting the median nerve of the right arm. An hour after taking the first powder, at 10.30 a.m., she felt "queer" (*Therap. Gaz.*, Sept., 1898), her head buzzed, and some nausea was present. At 2.30 she took another powder and again had headache, accompanied with marked vertigo, profuse lachrymation, with slight blurring of vision and severe pain in the face, jaw, and limbs. The bladder soon became affected; urination was frequent, only a small amount of clear, colourless urine being voided. Later the face became swollen, while the nausea persisted. After falling asleep at midnight there was gradual diminution of trouble, although the increased frequency of micturition persisted for ten days. The above symptoms combine some of those of overdoses of salicylates, and of quinine; it is therefore curious to note that no mention is made of buzzing in the ears, nor of albuminuria or hæmoglobinuria.

**6. Sulphonal.**

Although toxic symptoms have often been noted in connection with overdoses of sulphonal, they have usually been regarded as causing inconvenience rather than danger. A fatal case of sulphonal poisoning has, however, been recorded (*Berl. klin. Woch.*, Sept. 26, 1898) in a woman, aged thirty-two. The symptoms commenced thirty-six hours after the administration of sulphonal had been stopped, and consisted at first of pains and vomiting, and later, of paralysis and hæmatoporphyria. Besides ataxia, there was paralysis of the arms and legs. The

hæmatoporphyria occurred eight days after the onset of the toxic symptoms, and later, albuminuria and other evidence of toxic nephritis appeared. The chief change, apart from the toxic nephritis, consisted in the degeneration of the heart muscle. Wien, who records this case, considers that there is danger in the continuous employment of sulphonal, and believes that, if frequently given, intervals of four or five days should be allowed. He considers that sulphonal is a cumulative poison, and that when any toxic symptoms are present, excretion should be favoured by diuretics, while camphor should be used to avert the danger of cardiac failure.

**7.** A case of poisoning by *convallaria majalis* is recorded in the *Therap. Gaz.*, Feb., 1898. The patient, a child aged two, was given nearly a teaspoonful of liquid extract of *convallaria majalis* by mistake. An hour later the child was extremely restless, with continuous trembling of the arms and legs and with general convulsions. She could with difficulty be roused from her condition of stupor. The pupils were moderately dilated, the temperature was subnormal, the pulse extremely irregular and, when it could be counted, 140. Respirations were shallow and superficial; the face slightly flushed. There were no signs of gastrointestinal irritation, nor of diuretic or diaphoretic effect. With symptomatic treatment the child gradually regained her normal condition. Cases of poisoning with this remedy have so rarely been recorded that the foregoing account is of considerable interest.

**8. Local effects of iodoform.**

Dry iodoform gauze has been credited with the production of attacks of bullous dermatitis of the hands. The appearances in many cases have been attributed to gout, and relief is afforded by the firm application of bandages to the fingers, with boracic ointment (*Lancet*, Feb. 5, 1898).

B.—NEW REMEDIES.

I.—LOCAL ANÆSTHETICS.

**9. Holocaine.**—The introduction of this local anæsthetic, and its employment as a substitute for cocaine and eucaine, were referred to in the "Year-Book of Treatment for 1898." It is a derivative of para-phenetidin, from which are also derived phenacetin and lactophenin. It is insoluble in cold water, but readily soluble in alcohol and ether. The chlorhydrate of holocaine is, however, slightly soluble in cold water, and its aqueous solution is neutral and undergoes no change on prolonged boiling.