

DRUGS AND DOSES

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It is an important part of medical training to learn about drugs or medicines, about their effects and uses.

We learn this as medical students before we begin our hospital work, and it is usually taught at the same time as pathology. So that on the one hand we study the diseases, and on the other hand we study the remedies for these diseases. Knowledge about drugs or medicines is gained by the study of:—

1. *The Physical and Chemical Properties of the Substance.* That is its taste, smell, colour, appearance, molecular weight, whether it is acid or alkaline, its chemical composition, and so on. If the substance is a vegetable or animal one, its composition is very complicated. The chief active principles in a vegetable substance apart from oils, *acids* and salts are alkaloids—complex nitrogenous and sugar compounds, and glycosides.
2. The study of the *Pharmacology* and *Toxology* of the drug, that is its physiological effects or its poisonous action on animals or on man.
3. The *Therapeutic* effect, that is its effect on various disease conditions in animals or man.
4. The *Biological* effects of certain substances such as the anti-biotics, the hormones, and vaccine substances.

All this knowledge is gathered together in the *Materia Medica* or *Pharmacopœia*. Today it is a great body of knowledge, but one which is in constant change, for ever being increased and altered as new drugs are created, and old ones discarded. What is taught as *Pharmacology* today is not enough tomorrow. Drugs change, and treatments change, and although this has probably always been so, it seems as if today it is especially the case. Almost daily new medicines are being announced. Some of these are really new chemical creations, others are old well-used drugs in a new form. The *British National Formulary* which is a collection of commonly

used medicines is published every few years. This year's edition shows that of 120 new drugs added to the list, over 100 are synthetic.

Ephedrine is a common enough drug but recently it has been "ion-resin-bonded"—whatever that means! This is an example of an attempt by Pharmacy to make the drugs more powerful, more long acting, or less toxic, by special technical methods.

No doubt the modern drugs are the result of great labour, and great energy. It is reported that 100,000 soil specimens were examined in the search which resulted in the discovery of one of the new anti-biotics. For it is from the soil organisms that the organism-killers are fundamentally drawn. All this work is indeed worthy of respect and praise, yet the fact remains that the results of this constant toil—that is the drugs themselves—have often a short-lived spell of popularity. So many drugs appear for a time in the *Materia Medica* and then are seen no more.

If we compare this with the *Materia Medica* of Homœopathy certain striking differences can be seen. The Homœopathic Pharmacopœia or *Materia Medica* is a collection of some 2,000 drugs, slowly growing in number as new drugs are proved and added. But the important drugs which were used by Homœopathic doctors 150 years ago are still used and still effective today. The *Materia Medica* is composed mainly of substances taken from the three kingdoms of Nature—minerals, plants and animal substances. Each drug is described briefly in its physical and chemical properties, and an account is given of its toxicology. But the great bulk of the information given in the Homœopathic *Materia Medica* is derived from drug provings and from their therapeutic use. That is symptoms and signs produced in drug provers and symptoms and signs confirmed by the use of the drug therapeutically.

Certain differences between the *Materia Medica* of ordinary present-day medicine and the Homœopathic *Materia Medica* can perhaps be illustrated by a comparative study of a few drugs.

1. Let us consider firstly the mineral or metal Gold (AURUM).

Gold is a very insoluble metal, therefore it cannot be used as a medicine without some form of preparation.

The British Pharmacopœia lists many salts of gold such as:

Gold and Sodium Thiosulphate

Sodium Chloraurate

Gold Thioglucose
Calcium Auro thiomalate, and
Colloidal suspension of Gold.

Here of course it is quite obvious that it is not the pure substance which is used as a medicine, but compounds of which only 40-50% is actually gold.

The action of these medicines is uncertain and toxic reactions are both numerous and serious, especially when they are given by injection. 12-50% toxic reactions are reported. The medicines are used mainly in Rheumatoid Arthritis and Lupus Erythematorus, a systemic disease with or without skin manifestations.

It is perhaps a little unfair to use gold as an example, as so little use is made of it by orthodox medicine today, but it is a medicine with a long history of use, so that one cannot but imagine that it has great remedial powers, if use can only be made of these. And what is said of gold could be said equally well of arsenic, phosphorus, lead, silver, mercury and other valuable remedies, which are hardly used today, and then only in mixtures or as external applications.

If we now turn to the Homœopathic Materia Medica we find that AURUM (Gold) METALLICUM, as well as some of the simple salts of gold, were first proved by Hahnemann. By his special method of preparation, namely trituration and dilution, the effects of the drug could be manifested and a proving carried out.

This produced most striking symptoms such as—depression, melancholy, suicidal thoughts and vivid dreams, various bone pains, palpitation and many other symptoms. This proving, together with certain therapeutic indications from Arabian physicians mentioned by Hahnemann in his book "Chronic Diseases" formed the basis for homœopathic use of potentised gold. Through its use on these indications the various symptoms have been confirmed and added to, so that our more recent Materia Medicas contain a picture of the drug—a drug picture—which has been drawn by the combined efforts of provers and practitioners.

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