

up certain substances, the results of disintegration in the tissue, carbonic acid gas, &c., which are no longer of use to the body, and are therefore waste material. Some of these waste substances are removed from the blood when it passes through the kidneys, and some are eliminated when the blood is oxidized in the lungs.

It stands to reason that if this mechanism is carried out insufficiently, certain waste products are retained in the body which must have great possibility of harm. One of the most familiar conditions of retention is constipation—that is, a condition in which the waste material of the food is retained in the intestines, and sooner or later gives rise to symptoms of disease induced by the absorption of portions of this waste material, which exert a toxic or poisonous effect upon the organism. Another source of injury is present when the kidneys do not free the blood sufficiently of the toxic substances that should be removed from it, or if such substances are retained in the kidneys instead of being discharged with the urine into the bladder and into the outer air. Still another way in which noxious and harmful substances and waste materials are removed from the body is through the sweat glands of the skin, and the sweat has been shown to contain not only water and salt, but also uric acid and other harmful substances.

We have, therefore, four outlets by which used-up material, the retention of which would be harmful, may be removed from the body. They are the lungs by the exhaled air, the lower bowel by the passage of the bowel movements, the kidneys by means of the urine, and the skin by the action of the sweat glands. If any one of these organs or several of them do not function well, the body becomes poisoned by its own products of insufficient metabolism, and auto-intoxication results.

A constitutional auto-intoxication leads to imperfect nutrition of the cellular elements of the body. In this manner various tissues are injured and interfered with in their function; for instance, the elastic tissue which supports the intestines may become weakened, and may give rise to a condition known as ptosis, and to pendulous abdomen if the abdominal walls also are involved, or if they have suffered mechanically from some other cause, such as child-birth. This insufficient support leads to a systemic shock or depression of the system by decreasing the efficiency of the various abdominal organs, by diminishing the action of the large bowel and allowing faecal matter to accumulate, which then leads to further intoxication if this chain of conditions was due to primary constipation.

We have now a vicious cycle, namely, constipation, intoxication, malnutrition, ptosis, and faecal retention, which again accentuates the auto-intoxication.

It has also been shown that many mental diseases and nervous troubles, among the latter especially neuralgia, migraine, and sciatica, have an autotoxic foundation, and the same has been ascertained for certain affections of the eye, such as cataract and glaucoma, and for many other chronic ailments that resist ordinary drug treatments. There is no possible doubt but that migraine especially is due to auto-intoxication, and the disease is often relieved by the removal of the condition. The same is true for neuralgia and for some forms of rheumatism, or for what is popularly called rheumatism.

I believe I have given enough evidence to show that an insufficient functioning of the eliminating organs of the body is apt to be followed by serious consequences and by decided impairment of the health. The practical lesson to be drawn from what has gone before is obviously obedience to the principle "clean up, clean out, and keep clean." A proper state of nutrition depends not only upon the ingestion of suitable food, but upon its assimilation and upon the regular removal of all waste products or "ashes and clinkers." As far as the lungs and the skin are concerned in the function of eliminating, the habit of proper respiration and of personal cleanliness will secure the desired end. The clogging and therefore the insufficiency of the kidneys may usually be prevented by drinking enough water and by avoiding an excess of such articles of food as throw a large amount of labour upon these organs, especially proteids, meat, and spices.

MILITARY SURGERY.

Professor Monprofit, of Angers, in a report presented to the French Academy of Medicine on his surgical experiences in the Balkan War, finds that the conclusions arrived at and the knowledge of military surgery gained in the South African and Russo-Japanese wars are astonishingly confirmed in this war. Mortality from wounds is immensely lessened by three main factors:—A thoroughly equipped hospital and field ambulance whose personnel is instructed precisely in its business; immediate use of the individual packet of aseptic dressing carried by every man; and a rigid policy of non-interference and non-exploration of wounds except in the presence of a very evident call for intervention, such as a serious hæmorrhage.

[previous page](#)

[next page](#)