Clinical Notes on Some Common Ailments.

By A. Knyvett Gordon, M.B., Cantab.

NEURALGIA.

We will now take an ailment, or rather a set of ailments, which are not only very common but usually very painful also, namely, those affections of the sensory nerves which result in the transmission to the brain of sensations of pain, and which we are accustomed to group together under the name of neuralgia. Really neuralgia is a very complex and difficult subject, but I shall attempt in this paper to give some rough idea of what the pain is due to, and how it is usually treated; for the sake of clearness, it will be necessary to omit many details which can be filled in afterwards from any modern text book of medicine.

We must first see what a sensory nerve is. As every trained nurse knows, the working of the whole body is controlled by a system of telephonic messages between the brain and the organs of digestion, circulation, locomotion, and so on, every part of the body, in fact, being in direct communication with the brain. When, for instance, a fly settles on the tip of the nose, a message is sent along one wire, which is called a sensory nerve, from the nose to the brain to the effect that a fly is there and that the tip of the nose does not want that fly. Then a communication is sent from the brain to the muscles of the arm telling them to move the hand to the nose and remove the fly, the latter message being sent not up a sensory nerve but down a motor nerve. Currents, in fact, are only sent along a nerve in one direction, the sensory nerves taking information to the brain, and the motor nerves taking directions from it.

When a sensory impulse is very strong it is felt as pain, and in health painful impulses are not sent unless there is something out of the common taking place in a part as, for instance, when we crush our finger in trying to shut a door, but if a part is diseased, painful messages are sent very frequently, as when our stomach is inflamed and we have colic.

Sometimes, however, impulses come along a nerve when there is nothing the matter with the part to which the nerve belongs, and in that case the fault lies not with the part but with the nerve itself, and for our purposes that may be said to constitute a neuralgia, or, at least, one kind of it.

I have said that the nerves are wires, and that comparison is fairly accurate, for the structure of a nerve is almost exactly like that of an electric wire. If we take a piece of ordinary telephone cord we find that it consists of a thin copper wire covered over with a wrapping of silk: were it not for this covering, the current travelling along the cord would escape into the surrounding air or go off into anything the wire happened to touch, and so would not reach its destination. It is so with a nerve, which consists of a fine central core, or nerve fibre, enclosed in a nerve sheath, which is itself impervious to the current or nerve impulse travelling down it. Now the nerves, like every other part of the body, are supplied with blood from some vessels which in this case run in the sheath, and these vessels again have the flow of blood through them controlled by little nerves running in their walls so that the vessels are constantly becoming wider or narrower according as much or little blood is required by the nerve they supply. If a nerve does not get its proper supply of normal blood, or if the blood sent to it is in any way impure, we get neuralgia in that nerve, or in other words, neuralgia is the cry of a (sensory) nerve for healthy blood.

So we can now investigate the causes of neuralgia. Firstly, the sheath of the nerve may become inflamed so that it swells and presses on the nerve fibre (or there may be a tumour pressing on the nerve sheath from without), or the blood may be impure so that the nerve does not get its proper nourishment, or again, the endings of the nerve may be irritated by something wrong in the part with which the nerve is connected.

Then we may divide neuralgias not according to their cause but with regard to the situation of the affected nerve. Thus the nerves in some part of the head may be attacked, and we get headache, or it may be the sciatic nerve in the leg, and we have sciatica, or the nerves coming from the teeth—toothache—or from the face—faceache—and so on. So, in any case of neuralgia, we have to consider, firstly, whether there is some local cause, either pressure on the trunk of the nerve from without, or something wrong at the ends of the nerve, which is causing irritation, and, if we cannot find a local cause, then (and only then) do we try to ascertain whether there is some disease which is causing impurity of the blood generally. Frequently, both local and general causes are combined in the one case.

Let us now give some illustrations of local causes. Take headaches for instance. We may have a tumour growing within the skull and causing pressure on one or more nerves, or the brain may not be getting its proper supply of blood owing to a poorly acting heart, which is thus unable to pump the blood up to

previous page next page