Enteric Fever, and the Patient it Attacks.

By KNYVETT GORDON, M.B.Cantab.,

Medical Superintendent of the Monsall Fever Hospital, Manchester.

It has always seemed to me that to the intelligent nurse—and nowadays she is the rule and not the exception—enteric, or typhoid fever, must be one of the most interesting of diseases, if only for the reason that the ultimate result is, perhaps, more than usual, in her own hands.

But it is also one of the most difficult diseases to understand, because it seems to present itself in so many different forms. This is well seen in the typhoid wards of a large fever hospital, where at first sight it would appear that the patients were suffering from not one disease, but many different maladies. Perhaps, therefore, a few notes on these different aspects of the same disease may not be out of place for those nurses who find themselves, it may be, for the first time in charge of a patient afflicted with this complaint.

The first point I wish to make is that in any illness, as it presents itself at the bedside, there are two factors, the cause of the disease—in this case a germ—and the peculiarities of the patient it is attacking. The former is constant; a typhoid germ produces typhoid fever and nothing else; the latter is, perhaps, never the same. In nursing, as much as in doctoring, it is essential that this should always be borne in mind, for in it lies the explanation of many puzzles. We often find ourselves trying to understand the disease itself, when we should be using what we know, or can find out, about the person who has the disease.

About the disease itself I am not here going to say very much; the symptoms are to be found in any text-book, but it is necessary to see for a moment what it is that really happens when a patient "gets typhoid."

To begin with, in the large majority of cases, he swallows the germ, generally in water polluted by it. He may drink water, for instance, on the farm he selects, as "so healthy" for his country holiday, the healthiness often consisting, by the bye, in a total absence of ventilation in the living rooms, and an all-pervading smell of manure out of doors. This water, as often as not, comes from a well into which the local cesspool drains at frequent intervals. Or, he may eat watercress that has been grown on, or near to, a sewage farm, or oysters that have been laid down to "fatten" just by the outfall of a main drain. It is also possible to "catch" the disease by direct contact, as in nursing, with a patient. Here the germ sometimes enters through the breath.

However introduced, the germs find their way to the intestine (generally the last three feet of the small bowel) the glands inside the abdomen and the

spleen, where they multiply, and produce a poison, which is discharged into the blood, and finds its way, therefore, all over the body.

So we have in typhoid fever, two kinds of symptoms, those caused by the circulating poison, and those due to the fact that the manufactory of the poison is situated in the intestine and spleen.

The toxæmic, or poison symptoms are seen in the headache, the prostration, the wakeful sleepiness, the delirium of the onset and first week, and the heart failure, the lung failure, or bronchitis, and the nerve failure, or prostration, of the later stages. To the latter are due the diarrhœa, the abdominal pain, the distension, and in some cases, the hæmorrhæge from the bowel, and the perforation of the wall of the intestine itself. The spleen also is usually felt to be enlarged.

To combat the bacilli, the white blood corpuscles of the patient are called up. They multiply and attack the germs either, so to speak, at close quarters, by swallowing them up, or from a distance, by manufacturing an antidote, or antitoxin, to the toxin, or poison, which the germs have, as we have seen, produced. Either the corpuscles win, and the patient recovers, or the germs are successful and the patient dies. The intensity of the fever is a measure of the fierceness with which the war is being waged.

So much for the disease. Let us now see how it affects different types of patients.

In the first place, the age of the person attacked is important. Enteric fever frequently attacks children, though not usually at a very early age; it is distinctly uncommon under five, but from the age of ten upwards, its frequency increases with the age, until about thirty-five ; after this it becomes less common with advancing years. The severity of the attack, however, is more important from the nursing point of view, and here the age of the patient plays a most-perhaps the most important part. In children, recovery is the rule, and, moreover, the attack in them does not usually leave anything behind it. After the age of puberty, however, the danger increases as years go on, and, after the age of forty, or thereabouts, an attack of enteric is always severe, and usually dangerous. Even if recovery ensues, the patient is seldom as vigorous as he was, and he usually seems to his relatives to have aged four or five years after his convalescence is completed. It is necessary to be very careful in one's prophecies when one has to treat a case after middle age, especially as these patients often look fairly well. Children, on the other hand, generally look much worse than they are.

Another important point is the size of the patient, especially if he is an adult. Big men and women take enteric badly, while the spare and wiry usually do well; some of the worst attacks I have ever seen have occurred in robust, athletic men of



