

round the bottom of it, leaving a space for the extension cords to pass freely through. If necessary for the warmth of the body, a small blanket may be placed under the cradle, and the feet should be kept warm by means of toe-caps and hot-water bottles (see illustration 3).

In making a bed where a lower limb is required to be visible and resting—for example, on an inclined plane, or swung in a cradle, the upper bed clothes should be divided across the centre (as for the abdominal case), and the clothes at the foot end of the bed arranged to go *over* the uninjured leg and *under* the inclined plane, or cradle, which is supporting the injured leg (see illustration 4).

Some of the Complications of Enteric Fever, chiefly from the Nurse's Point of View.

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In a previous article I alluded to some of the varieties of enteric fever, or rather to the different ways in which that disease attacks different people, and I propose now to say a word or two about its complications.

By a complication, I mean here, an untoward event, something out of the usual course of the disease, not merely a symptom of more than ordinary severity. Thus I do not for the purposes of the present article include bronchitis, heart failure, or abdominal distension amongst the complications, though they might not inaccurately be described as such.

The complications that I shall describe are hæmorrhage from the bowel, perforation of the intestine, and relapse of the disease.

I will take the first two partially together, as they are really but degrees of the same process.

When the organism of enteric fever is swallowed, it attacks, amongst other places, the lining membrane of the small intestine, and a series of swellings result, which project into the interior of the bowel. In practice these swellings are found, for the most part, in the last three or four feet of the small intestine, though, in severe cases, they may exist in the large intestine also. As the disease progresses, these swellings slough away and the hard core of dead tissue drops out, leaving a cavity shaped like a cup—an ulcer, in fact.

Now what happens depends upon the depth of these cups: if they are quite shallow, the whole ulcer is situated inside the mucous membrane lining the intestine. This soon heals, and no harm is done; the ulcer has merely acted as a manufactory of typhoid poison, but the bowel where the ulcer is has suffered no appreciable damage. But the cup may be a deep one, and its floor is therefore beneath

the mucous membrane—that is to say, in the level where the blood vessels of the intestine are situated, so it is easy to see that at any moment one of these arteries or veins may be eaten into by the ulceration. Even if this does not happen, the vessels are deprived of their supporting tissue, and the slightest movement of the intestine may tear one of them open. Then, obviously, there will be bleeding from this vessel, and, later on, a discharge of the shed blood from the rectum.

But the ulcer may go deeper even than this, right through the whole intestinal wall, so that a hole is produced leading from the interior of the bowel into the general peritoneal cavity. This means that the contents of the intestine, amongst which are germs of all kinds, are shed into the abdominal cavity; immediate infection of this, with inflammation of its lining membrane, or peritonitis, as it is called, then occurs.

Anatomically, then, hæmorrhage from and perforation of the bowel are but degrees of the same thing; but in their symptoms they differ slightly, and in their effect on the patient they differ very much.

The great predisposing cause of either is diarrhœa, and I shall hope to show in a later article, what I will just mention here, that, except in some cases, where it exists from the first in a severe form, diarrhœa is not a symptom of the disease, but a sign that the food we are giving the patient, or occasionally the drugs that we are attempting to treat him with, are not agreeing with him. A patient whose bowels have been more or less constipated very seldom develops either hæmorrhage or perforation.

Along with diarrhœa as a predisposing cause goes abdominal distension. A patient with a flat abdomen scarcely ever has hæmorrhage from the bowel, and practically never perforates.

At the bedside, the onset of both these complications is often more or less sudden. In both there is fainting or collapse, and more or less pain in the abdomen; the face becomes pale and drawn, and the temperature falls suddenly to below the normal level; the knees are usually drawn up, and the abdominal wall is seen to be moving but slightly with respiration, while the chest is attempting to supply the deficiency by moving more than usual. The pulse is weak and rapid. *At the onset it is usually impossible to distinguish the signs of hæmorrhage from those of perforation.* Very intense collapse, with rapid blanching of the skin, and disappearance of the pulse at the wrist, however, points more to hæmorrhage, while pain, with a less degree of collapse and comparatively little variation of the pulse rate, is more suggestive of perforation. The more sudden the onset, the greater is the likelihood of hæmorrhage having occurred.

The important point now is what happens in the

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