about one half of all chorea patients develop some heart disease, usually involving the mitral valve. In these cases, the most important factor in causing recurrent attacks of chorea is anything that disturbs the child emotionally, such as returning to school with work to be made up, and the nervous tension of class work and problems requiring close concentration. We find many recurrences of chorea with the possibility of more heart damage following the child's return to school. Children who have been well and free from symptoms for months will show symptoms within the first month after school opens in the fall. Of course other things, such as unsatisfactory home conditions, or trouble of any kind that puts extra stress and strain on the nervous system will have the same bearing on recurrent attacks.

Usually there is a rather characteristic story from the parents. They have noticed a change in the disposition of the child. He has become irritable and peevish, weeps easily, and is always in trouble at play. His school work has become poor, and reports from his teachers say that he is inattentive and not interested. These are symptoms that appear long before any muscle activity is noted and are important to recognise so that rest and treatment may be started at once, to avoid, if possible, any further progress in the heart disease which may have been started by previous attacks.

As far as the heart condition itself is concerned, the treatment is the same whether the rheumatic infection causing it was manifest as acute rheumatic fever or chorea. Rest, good food, nursing care, and hygiene are the important features. In the recurrent attacks of rheumatic fever, some form of salicylate medication is used; while in the recurrent chorea cases, sedation is important, usually in the form of phenobarbital in doses sufficient to control the nervousness. In childhood, the heart conditions are discovered and watched from the very beginning of the disease. Nursing care and advice are important and helpful in checking the progress of the disease—or at least in slowing it up.

Other conditions of rheumatic heart disease, such as acute myocarditis, acute pericarditis, and adhesive pericarditis are not discussed in this article, because patients with these conditions are usually seriously ill in the hospital. They are oftentimes terminal cases, and their care is not the immediate responsibility of the public health nurse. Likewise, patients with severe endocarditis who develop auricular fibrillation with congestive failure are hospital cases, usually the end result of several previous attacks of endocarditis. From the standpoint of preventive medicine, the problem is to prevent patients from getting to this severe terminal stage if possible. However, if the condition does appear, rest, skilled nursing care, and medication as indicated comprise the general treatment; and if the patient survives the attack, a very careful, restricted life is necessary. Fortunately, the children who develop these conditions are very few.

Sufficient serum to inoculate one million British children against diphtheria is on its way from the United States. Part of this supply is being flown over, since the demand for it is steadily increasing and home production, though greatly augmented, cannot keep pace with it.

SCABIES.

By MISS L. GODDARD, S.R.N.

Scabies, or itch, is caused by a parasite called the Acarus (Sarcoptic) scabiei. Avenzoar, an Arabian physician, is said to have recognised its characters in the 12th century.

The parasite is a broad flat ovalshaped body, with two pairs of mouth parts and four pairs of appendages, and which, by burrowing into the epidermis, excites intense itching and rash. The female acarus, which is larger

Abdominal view of female, magnified 65 diameters.

⁶⁵ diameters. than the male, burrows its way down beneath the cutis, laying its eggs at the end of the burrow, which can be seen as a dark line.

The sole function of the male acarus is to fertilise the female, after which it dies. The eggs then hatch in about a week into larvæ, and at the end of two or three weeks the female dies.

The young insects, which are sexually mature in three weeks, then commence on their own to burrow afresh in other directions, a common place being in the folds of the skin which is most delicate, such as the web of the fingers, toes, wrists, soles of the feet, the axilla and the front of the abdomen.

The acarus, which appears as a pearly white colour can be dug out by means of a needle if carefully looked for with the aid of a hand lens. The intense itching, especially at night, causes the patient to be constantly scratching, and the dirt thus introduced into the skin gives rise to eruptions of pimples, blisters or pustules, and to a rash somewhat resembling eczema which may obscure the true nature of the disease ; but in typical cases there is rarely any doubt as to the diagnosis.

It is contagious and acquired by direct contact, and much care is needed that all clothes, bedding and blankets should be well disinfected, as clothing may remain infective for at least eleven days.

During the winter months, people of the poorer classes live more indoors, and overcrowding and lack of cleanliness result in the spread of this disease if one member of the family has contracted it, particularly so with children, as they often sleep together.

It is not only necessary to rid the patient of the disease, but to prevent it spreading, and to prevent re-infection occurring the treatment should include the whole family.

In a hospital, any suspicious case should at once be reported, as failure to do this may result in infection of the whole ward.

There are various forms of treatment, one being sulphur ointment, or a mixture of lanoline and balsam of Peru, which is applied after scrubbing the skin with soft soap and hot water for 10 to 15 minutes. The hot water will open the pores of the skin by removing the loose scales to allow the ointment its full action.

In some foreign hospitals the patient has to soak in a warm bath, is scrubbed with soft soap and left to soak for one hour. He is then rough dried, sulphur ointment is applied and he is then discharged as cured.



