The Nursing of Heart Diseases.

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(*Continued from page* 531.)

CHAPTER III.

Endocarditis.

This term is applied to the inflammatory condition of the lining membrane of the valves of the heart, which has already been described in considerable detail. Sufficient has probably been said for the nurse to understand not only the results to the patient of this inflammatory condition but also the main principles upon which the nursing treatment of such patients is carried out. As a general rule, the services of a nurse are usually only called for when the disease is acute. When the temperature has fallen, and the patient is able to get out of bed, and move about, the attendance of the nurse usually ceases. But then again, as soon as the secondary effects of the disease exhibit themselves, such for example as implication of the lungs or dropsy of the limbs, the need of nursing care becomes again apparent. It must, therefore be understood that in the present Lecture, reference is chiefly made to the condition of patients more or less acutely ill either from a primary attack of endocarditis or from some subsequent development of the disease.

With reference to the former class, and speaking generally, Endocarditis may be said to occur most frequently during the progress of some acute illness such as rheumatic fever or scarlet fever. The patient complains, as a rule, of tightness and oppression of the chest, though in some cases, there are no heart symptoms of any kind, the new development being concealed by the symptoms of the current illness, and it is only when the heart is examined that the new disease is discovered. by means of the harsh rubbing sound which is described as a *bruit* or "murmur," audible over the seat of the affected valve. This blowing sound is explained by the mechanical friction of the blood-stream over the roughened valve edges, and, therefore, it can be easily understood that the loudness of the sound will depend partly upon the extent of the roughness and partly upon the strength of the heart, that is to say, upon the force with which the blood is driven over the inflamed valves.

In the condition which has been described as stenosis, or closure, or contraction, of the valvular orifice, by the growing together of the inflamed valve edges, the sound is generally loud, harsh and rolling, occurring just before the first sound of the heart, and therefore described as the "*præsystolic murmur.*"

If the valves be merely roughened and not united, and there is a certain amount of regurgitation therefore, the murmur is generally softer and more prolonged, and occurs with, and usually obliterates, the first sound of the heart, which is generally considered to be caused by the contraction of the muscle of the ventricle, and the sound is therefore termed a "*systolic* murmur."

If the disease has caused incompetence of the aortic valves so that the blood flows back from the aorta into the left ventricle, the murmur is heard with the second sound of the heart, and is therefore known a *diastolic* murmur. From what has been already said it will be understood that when this bruit is audible, and aortic incompetence is diagnosed, the condition of the patient is very grave.

Another fact which the nurse may remember is the frequency with which a "thrill" can be felt by the fingers placed on the chest wall over the apex of the heart, in cases where the mitral or tricuspid orifices are contracted, and in which, therefore, the friction over the valves is very great. The sign in question is supposed to be due to the convection of this friction from the heart's cavity to the chest walls. It varies in force according to the strength of the heart, and is, therefore, sometimes imperceptible, and sometimes can be plainly felt.

In an acute case of endocarditis, the patient is, of course, kept strictly in bed, and as a general rule most of the treatment is directed against the primary disease from which he is suffering. The special symptoms of heart inflammation can be alleviated greatly by careful nursing. The palpitation which is so common in these cases is often relieved by the application of belladonna plasters; and, in using these, there are several practical points to be remembered.

As in the case of all other plasters, the skin should be properly prepared for its application by careful washing and drying. Then the plaster should be applied from the apex of the heart upwards. There is no possible advantage to be gained by placing the plaster over the abdomen, but it is a strange fact, and one which exemplifies the need for special instruction, that in many cases a nurse who is directed