

Eighteen of these thirty boys, however, showed cardiac murmurs of one sort or another. In thirteen a soft systolic murmur was heard all over the cardiac area when in the recumbent or left lateral posture.

Three showed basic systolic murmurs, disappearing on full inspiration.

One showed a basic systolic murmur present in the recumbent posture alone.

One showed a basic systolic with no evident change on respiration. This, from its character and position and from the absence of any other suggestion of cardiac involvement, was regarded as certainly functional.

To many, perhaps, the considerations which I have brought forward this evening may seem *altbekanntes*, and yet the number of men who are refused by insurance and mutual benefit organizations, whose career is cut short in army and navy because of a lack of appreciation by over-conscientious examiners of just these points, is really large.

In one year, the writer had had occasion to examine fourteen young men between the ages of eighteen and twenty-four, the condition of whose hearts had been questioned by the careful examiners of applicants for a certain well-conducted organization. In one of these subjects there were marked extra-systolic irregularities. One was a nervous young man with a rather rapid heart. All the others, twelve in number, showed various forms of the three types of functional murmurs of which we have spoken, without other serious evidence of cardiac defect.

Such experiences emphasize the fact that it is important to realize that cardiac murmurs are, in many instances, normal phenomena, that under some circumstances and conditions they are to be expected in normal individuals, and that certain of these truly functional murmurs are not difficult to recognize and to account for.

It is also important to distinguish these true functional murmurs from those other murmurs to which the same term is often applied, murmurs which depend on valvular insufficiencies due to pathological weakness of the heart muscle.

Lastly, it is well to remember that 'tis only when murmurs occur in certain localities or in more or less definite relation to the heart sounds, or when they are associated with evident anatomical or functional derangement, that they are necessarily of pathological significance.