

and to the left. Wybauw (Journ., Med., de Brux, March 15th, 1900) has pointed out that some dilatation of the heart is 'very common in chlorosis and anaemia and Byron Bramwell mentions the same thing.

12. Cardio-respiratory sounds are sometimes mistaken for cardiac murmurs. They are produced in the adjacent lung by the cardiac movements and largely disappear when the patient holds his breath.

13. Functional murmurs tend to disappear as the patient improves in general health. This is not the case with organic murmurs which are apt to become louder as the heart's action strengthens.

14. Signs of breaking down of compensation are rare in functional cases and such breaking down should always suggest organic disease of the valves or heart muscle.

Here it should be mentioned that the term functional heart murmur may be misleading in that, although nothing be wrong with the actual valves themselves, a great deal may be organically wrong with the rest of the heart. Thus in a case of fatty degeneration of the heart muscle with consequent dilatation, a mitral murmur may occur from enlargement of the mitral orifice. Such a case could not be called one of valvular disease and yet the term functional heart murmur would scarcely suggest the serious condition present. Theodore Fisher in a paper read before the Bristol Medico-Chirurgical Society on the 13th of May, 1896, (Lancet July 18th, 1896) states his belief that in most cases of even rheumatic valvulitis where, at the post-mortem, vegetations are found about the mitral valve, the leakage occurring during life was not due to the valvular disease, which often is evinced chiefly by a row of small vegetations which could not possibly prevent the closure of the cusps, but was rather due to the associated dilatation of the mitral sphincter. In other words we have a functional condition complicating the true endocarditis, and if care be taken not to strain the heart during convalescence the valve will again become competent in spite of the vegetations on the surface of the cusps. Dr. Fisher continues, "Dr. Caton treated several patients suffering from rheumatism, over whose hearts cardiac murmurs were audible, by rest in bed and blisters over the precordial region. Forty patients were kept in bed on an average of 41 days and in twenty-nine the murmurs disappeared. Dr. Caton attributes the disappearance of the murmurs to the treatment of the endocarditis by the blisters, but it seems far more reasonable to suppose that the prolonged rest in bed allowed the dilated hearts to recover, and the murmurs depending upon the dilatation was consequently noted to have disappeared while the patients were under observation."

15. Seeing that functional murmurs are so often found by accident so to speak, as for example examining for life insurance, it follows that a