

unequal closure of the valve, and the absence of the murmur, have been the result of normal shutting of the same ?

2. The circumstance of organic disease of the mitral valve existing without its usual murmur and yet being accompanied by a murmur from disturbance of the papillary muscles—*i. e.*, by a dynamic murmur—is somewhat singular, and has not, within my knowledge, been hitherto mentioned.

3. This case affords an excellent proof, in addition to the many already recorded, of the possible existence of great obstruction of the mitral orifice, without morbid sound to indicate it ; nay, more, it shews that the same absence of bruit may obtain, even though the left ventricle be hypertrophied and capable, one would suppose, of propelling a current of blood with sufficient force to produce a loud murmur, for the natural weakness of the auricular systole is generally admitted to be the cause of the infrequency of diastolic murmur in obstructive disease of the auriculo-ventricular orifice. In speaking on the subject of contraction of these orifices, the accomplished auscultators, MM. Barth & Roger, made the following observation, which appears of peculiar value when placed in connexion with this murmur:—"Of all the preceding lesions, this is the one which most frequently produces no sound ; so that, if a patient presented the general symptoms of an organic affection of the heart with obstruction of the circulation (palpitation, dyspnœa, smallness of the pulse, œdema of the lower extremities), the absence of a cardiac soufflet would not be a reason for renouncing the idea of a constriction ; but we should then conclude that auriculo-ventricular coarctation existed. We have more than once, from this negative sign, pronounced a diagnosis, which the autopsy confirmed."*

4. It is still a debated question whether mitral obstruction, with hypertrophy of the left auricle, is ever accompanied by diastolic thrill, in the above case no such thrill was observed.

5. Since Hunter first, and Adams and Wilkinson King afterwards, wrote upon the safety-valve function of the tricuspid valve, an opinion has become tolerably prevalent that regurgitation through that orifice is a frequent, if not a constant, phenomenon in health, especially whenever active exercise, &c., has quickened the circulation and sent an increased quantity of blood to the lungs. This opinion, it is true, originated before the evil influence of tricuspid regurgitation on the systemic circulation was understood, and in late years it has been called in question by such authorities as Hope, Blakiston and Walshe. If such be the natural healthy action of the right auriculo-ventricular valve, why were none of the signs of tricuspid regurgitation, turgescence, knottiness and visible pulsation of the cervical-veins, systolic murmur at right apex, œdema or

* *Traité pratique d'auscultation*, p. 434.