

(b) Mitral stenosis is due to contractions and adhesions of the valves and degenerations in the neighboring wall of the ventricle. It induces marked dilatation and hypertrophy of the left auricle, right ventricle and auricle, and causes pulmonary congestion. The signs are presystolic thrill and murmur of a churning character, hypertrophied right heart, the left heart normal in size, and accentuated pulmonic second sound. The prognosis is unfavorable. Failure of compensation is the result of this lesion.

3. Pulmonary incompetence is exceedingly rare.

4. Tricuspid incompetence may be temporary, to relieve a laboring heart, or permanent. It is a common sequence of aortic stenosis, mitral incompetence and aortic regurgitation. The signs are systolic pulsation in the jugulars, swollen and pulsating liver, a soft, low, systolic murmur over the lower end of the sternum, accentuated pulmonic second sound, increased cardiac dullness to the right of the sternum, epigastric pulsation and cardiac failure. The prognosis is bad. The treatment of all valvular troubles is to maintain the maximum of compensation.

5. Thrombi in the left ventricle may cause systemic emboli in the right ventricle; they give rise to pulmonary apoplexy and infarcts.

6. Ulceration of chronically diseased valves may give rise to malignant endocarditis manifested by rigors, fevers, chills, sweats, cardiac pain, sense of oppression, shortness of breath and embolism. The prognosis is very grave.

*The Senile Heart.*—The heart is small, not necessarily hypertrophied, pigmented, fatty or atrophic. It shows brown atrophy.

The arteries are tortuous, stiff and rigid. The patients are emaciated, sallow, anemic and cachectic, with arcus senilis. The heart is small and its action weak. The pulse is small, rapid; it may be slow, at times irregular and intermitting. Syncope is common. The treatment is mainly stimulants for the acute attack.

*Angina Pectoris.*—This symptom-group is induced by all such cases as increase cardiac embarrassment by constricting arterioles, by local cramp of the muscle and by stretching or compression of the cardiac plexus. Fatty degeneration and mitral regurgitation tend to relieve the tendency towards it. It is least dangerous in fatty infiltration and gravest in aortic regurgitation, atheroma, fibroid degeneration and aortic and mitral spasm. It is characterized by intense, agonizing constricting precordial pain. In mild attacks it may be only dull and oppressing. In severer attacks the pain radiates down the inside of the left arm to the fingers, to the sternum, to the intrascapular region, to the side of the chest and at times to the