

white to patients whose position in life enabled them to take every precaution. In 27 cases carefully followed up, the average duration of life amounted to about three years. It is more than probable that this period, brief as it is, is too long, if patients be included who are obliged to work.

In estimating the expectation of life that can be held out to any given patient, therefore, it is fair to take this as a basis: that though he may live for ten or fifteen years from the moment of discovery, it is not likely that he will last for more than three years.

Sudden Death. Thoracic aneurysm is one of the notorious causes of sudden death. To the dangers never absent from a heart whose coronary arteries are diseased—as they are in a majority of cases of aneurysm—are added those of rupture, with rapidly fatal hæmorrhage; and, in a few instances, those of aortic insufficiency.

In de Havilland Hall's experience in private practice, about one-third of his patients died suddenly.

This sudden termination may be due to cardiac failure or to rupture. The omens pointing to the former possibility are not different from those of chronic cardiac disease generally: paroxysmal cardiac pain, dyspnoea on exertion, the alternating pulse, and physical signs of aortic regurgitation, all enhance the risk of an abrupt failure of the contractile power of the heart. In de Havilland Hall's Westminster Hospital statistics, over 40 per cent of the deaths were due to cardiac failure. Aneurysms pointing externally rarely burst suddenly; indeed, leakage of blood into the subcutaneous tissues may continue for quite a long while in such cases without foreshadowing rupture, and the patient may die eventually of exhaustion or some such cause. Aneurysms of the intrapericardial aorta are particularly liable to burst into the pericardial sac: this is immediately fatal, but in most cases the diagnosis has not been made. Fatal hæmorrhage occurs more frequently in patients who present evidences of pressure on the trachea, bronchi, or œsophagus, than in those who do not show these signs. The rupture may also pour its blood into the mediastinal tissues: this also is more likely to happen if the sac arise from the transverse or descending part of the arch. Curiously enough, patients in whom the aneurysm bursts into a great vessel—superior vena cava or pulmonary artery—often survive the immediate shock of the catastrophe and live for weeks or months. A common direction of rupture is into the left pleural sac: this is particularly apt to occur in aneurysm of the descending aorta, and kills quickly.

Features of Prognostic Significance.—The age of the patient has a little bearing on the outlook: the older the patient the better the prognosis. "Healed aneurysm is rarely seen in a man under forty" (Osler). This is partly due to the quieter life of elderly men, partly, perhaps, to the fact that the younger the man in whom an aneurysm has appeared, the more likely is it to be due to active syphilis of the aorta. And the more active the syphilitic process, the sooner will the aneurysm burst.