

D. A group of cases, not large, I am sorry to say, in which after attacks of great severity, recurring for months, or for as long as two years, complete recovery takes place. These are cases I shall deal with more fully in speaking of prognosis.

EXTRA-PECTORAL FORMS.

Angina pectoris is an affection of the arteries. The studies of Nothnagel in 1867 on the vaso-motor phenomena of the attacks widened enormously our conception of the nature of the disease, and we have come more and more to regard the symptoms of the attack as an expression of a *vascular crisis*, to use the apt term introduced by James Collier. I shall try in the next lecture to discuss the disease from this point of view. Meanwhile here may most conveniently be considered certain extra-pectoral, or, more properly speaking, extra-cardiac features, which have a direct bearing upon our conception of its pathology. Following this wider conception it is interesting to note in the literature the use of such terms as "angina abdominis," "angina cruris," "angina brachialis." In looking over my list I find a considerable number of instances in which prominent features of the disease were extra-pectoral or there were symptoms suggestive of vascular disturbance in distant parts. It is difficult to make a classification of the symptoms, and certainly one cannot take for granted that they were always due to vascular crises. But I may roughly group the cases into those with (A) peripheral, (B) abdominal, (C) pulmonary, and (D) cerebral features.

A. *Peripheral angina*.—Heberden first recognised that the patient could die from angina pectoris without any pain in his chest. In his *Commentaries* he describes the case of a man, aged 60, who began to feel, while walking, an uneasy sensation in the left arm, never while in a carriage. After continuing for ten years it would come upon him two or three times a week at night, and he would have to sit up for an hour or two. In all other respects he was healthy and strong, and he never had a pain in the chest. Then he added: "This disorder, its seat excepted, perfectly resembled the angina pectoris, gradually increasing in the same manner, and being both excited and relieved by all the same causes. He died suddenly without a groan at the age of 75 years." In the case of Lord Clarendon's father, as noted by Blackall in his famous book on *Dropsies*, the pain was brachial, even in the fatal attack.

Four cases in my series presented in some degree this brachial peculiarity. In L. N. H., aged 58, the pain began in the middle of both forearms; when walking he would be warned at once of the onset by sharp pains appearing simultaneously about the middle of both arms; if