

reckoned among the causes, we ought next to inquire into the conditions under which thrombosis is likely to occur. * * * We all know how the blood slowly coagulates in the great vessels after death, and that this change in some cases precedes death. It occurs during the act of dying, more especially perhaps when this process is prolonged or marked by extreme exhaustion, or when it forms the closing scene of long-continued and exhausting disease. And with reference to the question whether a clot has been formed before or after death, the subject is not a very profitable one, and from its very nature cannot admit of a definite answer. The process of dying is oftentimes very gradual. Molecular death is not synchronous with systematic death; and the coagulation of the blood which is the visible sign of its dying, is in the body oftentimes a very ill-defined change. It is more satisfactory to enquire the age of blood-clots; whether these are quite recent, or bear evidence of change subsequent to their formation, in their degree of contraction, their dryness, density, and corrugation; in their colour and construction, whether laminated, or in minute structure fibrous; or—and this is usually most marked in the centre—showing signs of degeneration; or adhering to the living membrane of the vessel which is more or less affected or destroyed. Only one word further with regard to their colour. These clots are generally described as becoming paler with age. But this holds good in one respect only. When clots have formed in the living vessels, and have at first the colour of the blood, undoubtedly, as time goes on, they gradually grow paler. The hematine is absorbed, they come to consist of fibrine only, and this at length assumes a pale yellow or buff tint, and so it may remain. But we all know very well that, after death, clots are frequently found in the cavities of the heart and larger vessels, which are so soft and uniform that we have no doubt they have been rapidly and recently formed—little or no doubt that they have been formed after death—and which are nevertheless very much paler; in fact, almost white. Of course the immediate explanation of this is obvious enough. It results from the mode of their formation, and the difference is

due to the relation which the fibrine holds to the cells during its production. But, again, "The great veins are very liable to become obstructed by clots forming in them when the patient is greatly debilitated, and when the circulation is enfeebled, by inflammatory affections, by discharging abscesses, difficult labours and other causes." (Prof. Humphry.) * * * But sometimes simple thrombosis appears to be determined by causes which are more purely local. Thus pressure on veins, producing obstruction of the circulation, may lead to the formation of clots. * * * So also, and with far more probability, will injury, such as laceration of the walls, or the presence of adjoining mischief. Thus inflammation or its products may coagulate the blood. But in the last case, the thrombosis is usually associated with and forms part of phlebitis; and to the causes of phlebitis I now return. Phlebitis, then, may result from wounds of various kinds, and other injuries of veins. * * * Phlebitis may complicate gangrene, ulceration, erysipelas and other affections. * * * In this class may be reckoned that form of phlebitis which sometimes occurs after delivery: puerperal phlebitis. Then there are causes of a phlebitis, which is more common in men than in women, that may be termed idiopathic. The rheumatic diathesis was formerly supposed to be a predisposing cause; but now perhaps for rheumatism we should substitute gout. * * * You all know what Sir James Paget has written on this subject—gouty phlebitis—and I shall not venture to add any touches to his picture. Then phlebitis often exists in the course of blood poisoning in its various forms. * * * Phlebitis is not common in childhood.

Symptomatology.—The phenomena of phlebitis—its symptoms—are comparatively simple, and for the most part sufficiently clear. The disease often starts with pain—or, perhaps, more accurately speaking, aching—and acute tenderness in the course of the affected vein, which in the majority of instances, I think, at the outset presents to the touch evidence of being plugged. At other times, beyond perhaps an aching of the leg, or other part, the only local evidence of the mischief is oedema.