

earliest case which allows of any conclusion concerning the inception of this action is one by Mr. Fergusson, reported in the *London Medical and Surgical Journal* for 1841. The patient died 7 days after the carotid was tied, and yet the innominatal tumor, Mr. F. says, "was found to be nearly filled with pretty firm clots of fibrin . . . similar to such as are met with in aneurismal sacs," and different to the post mortem shreds called polypi. Another important fact to know is, that coagulation goes on as surely and as rapidly as if the ligature had been applied around the vessel on the cardiac side of the tumor. This is strongly corroborated by the case last cited. The eminent surgeon in his recital adds that the clots were not only aneurismal, but were like those that would be found "about the same period after the Hunterian operation has been performed." The occurrence of the foregoing changes is invariable. I have not met with any case in which they had not supervened. At a period still more remote than the last referred to, the external tumor is found to have completely disappeared, and the *visible* signs of aneurism cease to be discoverable. This was strikingly obvious in the cases above tabulated—in Evan's case the tumor was as large as a walnut, and, in Mott's, the size of a pigeon's egg, yet in both its disappearance was perfect—in Mott's, 26 days after the operation, and in Evan's, rather more slowly; in Morrison's the subsidence was not so complete, or, rather, was not so pronounced, as there was a concurrent aneurism of the right carotid between the ligature and the tumor. It may readily be conceived that simultaneous alterations connected with the aneurism in the chest are advancing, and from analogy it were easy to describe them, but, as a matter of fact, there are no actual observations by which they can be demonstrated. The circumstances above specified—increasing hardness, and decreasing volume—render it highly probable that the changes begun progress, and that advanced phases of organization occur in the fibrinous clot, similar to those noticed in aneurisms cured by either compression, or the Hunterian operation, or other method. In Morrison's case, the longest-lived in which a post mortem was held, the arteria innominata was found contracted to within twice its proper bulk, instead of a "large tumor in the neck where it extended from the chest," the coagulum consisted of *dense fibrous laminae*, and the vessel was studded with spiculæ of ossific matter. From the preceding data the following inferences may be drawn:—

1. Ligature of the carotid artery reduces the volume of innominatal aneurism.
2. This operation causes the obliteration or occlusion of the sac.
3. This result is due to the fibrillation of blood arrested in its circulation.