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## Selections : Medicine.

### PROPHYLAXIS OF HEMIPLEGIA.

BY W. H. THOMPSON, M.D.

In no class of diseases is the study of their etiology so important as in nervous affections, because the majority of them are not primarily nervous in their origin, but rather are simply nervous sequelæ of diseases occurring wholly in different structures. Their effects on the nervous system, however, are such that its symptoms completely overshadow everything else and thus lead naturally to their too exclusive consideration, especially as regards treatment. A man, for instance, who survived for a while the lodgement of a bullet in his brain, would scarcely be rated as an example of nervous disease, and yet in what respect does his case essentially differ from one of hemiplegia due to the sudden lodgement in a cerebral artery of a vegetation detached from a cardiac valve, except that in the latter the foreign body came from within rather than from without? So, also, an apoplectic clot is almost always the result, not of any nervous disorder, but of vascular disease. Apoplectic hemiplegia, therefore, requires for its proper understanding, by the practical physician at least, not so much a minute acquaintance with the localization of nerve-centres and their functions, as a knowledge of the effects, for example, of disorders of the kidneys upon the texture of the arteries. Again, in syphilitic hemiplegia, it is not the nerves, but rather the connective tissue, or else the membranes of the brain, which are involved, and from which the entire trouble proceeds, producing nervous symptoms either by exudation

or effusion. Hence, in most paralyses, the nervous lesion is secondary to primary disease elsewhere. Etiologically, therefore, we may divide the common forms of hemiplegia into three classes. 1. Embolic; 2. Syphilitic; 3. Vascular.

Embolism, producing hemiplegia, is most commonly due to one of those little wart-like formations caused by endocarditis upon a heart valve, which, after breaking its pedicle, is washed up to the circle of Willis. If the plug passes beyond the circle of Willis it is then oftenest arrested in the left middle cerebral artery, with results more disastrous than if it occluded a much larger vessel below the great arterial ring. The reason of this is, that the arteries of the brain do not anastomose above the circle of Willis, so that if one of them become closed, those parts of the brain supplied by it can get no help from their neighbours and are hence likely soon to soften.

There are necessarily no premonitory symptoms in this form of hemiplegia. It comes without giving any warning to the patient or affording to the physician any signs, other than if he knows his patient has roughened valves, he may suspect a liability to it, but no more. Nothing, therefore, can be done to prevent its occurrence. We may be tolerably assured of embolism in any given case, if there be a heart murmur, if there be a healthy radical artery, if the attack was extremely sudden, if the patient be comparatively young, and if the consciousness is intact, which is often evidently the case, though there be total aphasia. But on the other hand, the absence of these elements does not disprove it.