

Cramps in the calves of the legs, occurring generally in the morning, but also at other times, are of even more serious import than the preceding, especially if these are also present. A dread of descending stairs is common also, but is rather a sign of senility than of hemiplegia.

Of mental symptoms, the most characteristic are sudden loss of memory, sudden confusion of ideas, and sudden loss of words. When the memory is at fault, it is not that of old, but of recent impressions, exemplified in telling a story or relating an event twice over, surprising friends by not recalling what happened a few days before, and then having it suddenly recur to him, etc. Confusion of ideas, the patient of course is himself aware of, and on account of its strangeness he is apt to be much alarmed by it. The loss of words is also of a special kind, not at all like the common experience of momentarily being at a loss for the right word, when we send the mind hunting one up, but the patient feels that some very ordinary word has suddenly escaped him, and with it also the idea he had and was about to express, so that he asks, what was I saying? All these mental derangements are palpable to the patient himself, and often lead to a too well-grounded foreboding of impending misfortune, but as they may also occur at any time of life from temporary states of cerebral anæmia or exhaustion, they are not conclusive by themselves, any more than cough is conclusive of phthisis, but still they are to be carefully noted. Mental strain, impoverished blood, or great loss of it, etc., produce just such symptoms, the result to the nerve-centres being the same, only that in the vascular disease, which threatens apoplexy, we have a more permanent cause of anæmia of those centres from narrowing or occlusion of great numbers of the blood vessels.

You may then begin the examination for the physical signs of the vascular disease by inspection of the circulation of the skin; the back of the hands affording the most convenient locality. The most common as well as significant appearance is a mottled skin, composed of larger spaces of a marked unnatural whiteness, interspaced with smaller ones pigmented brown or olive-coloured. Should you

rub the hand smartly, you can produce little more than an evanescent blush in the whitened portions, its quick fading indicating the paucity of permeable capillaries. For the same reason, the skin, where it is not exposed, is nevertheless altogether too white and scurfy. This state of affairs readily affords the explanation of the characteristic pulse, which you will soon have to examine.

You cannot now be too particular in the investigation of the state of the arteries any more than you can be too particular when you are testing a lung. Just as you should complete percussion before you begin auscultation, so the first thing to do with the radial is to feel it, without allowing your attention to be drawn off to the pulse-beat. If the radial artery is healthy, you can scarcely feel it at all; I mean distinguish it in its bed from the surrounding structures, and you judge of its presence there almost wholly from the throb of the pulse. But I doubt if such an artery as that existed in the body of a patient with vascular hemiplegia for years before his accident. Instead of that, the coats of his radial gradually lost their pliability, then become more and more thickened, growing harder all the time, until a year or so before the "stroke," that artery could have been felt more like a strong pulsating cord which you could roll over in its bed, perhaps giving to your fingers the impression of a wire under the skin. If now you note for a moment how far along the forearm you can trace the vessel, you may find it distinguishable half way up, and by the pulse-beat, even two-thirds the way to the elbow. What a departure this is from the healthy state, you can learn by the first examination you make of a person with healthy arteries, when the vessel becomes indistinguishable within an inch from the wrist. The next point to note, whether besides being hard, the artery is uniform in its calibre, or the reverse. In many cases of arterial disease, and especially in old persons, it may be very irregular, even to the extent of resembling a string of beads rather than like a smooth cylinder. This is due to atheromatous or calcareous patches of degeneration in its course, and as just stated, they are particularly frequent in the aged; but I believe that in the majority of