

a descending degeneration in left one. Pons normal. In medulla, left anterior pyramid looks a little greyer than normal at its inner border. Sections of the spinal cord do not show any alteration in the appearance of the columns.

*Heart* not enlarged ; valves competent ; a little stiff. *Aorta* somewhat atheromatous. *Lungs* congested at bases ; bronchi full of muco-pus. *Kidneys* somewhat fibroid ; right pelvis dilated and contains pus and two small calculi. *Liver* of average size ; substance soft.

*Remarks.*—These two cases present certain features in common : the lesion was confined in both to the caudate and lenticular nuclei, and the strand of white matter, known as the internal capsule, and of it chiefly the anterior part lying between these nuclei. There was no loss of sensation in case I ; in case II the loss was only temporary. The following points are of interest :

First, *the distribution of the lesion.* The degenerative changes in the brain substance depend for their distribution upon the vessels. The large ganglia at the base of the brain are nourished by arteries which are given off from the main trunks of the circle of Willis. Of these the most important pass perpendicularly up from the first portion of the Sylvian arteries and supply the corpora striata and anterior part of thalami optici. These are divided into two sets by Duret—internal and external. Of the latter, some are anterior, others posterior. The former, named the lenticulo-striated, supply the external portion of lenticular ganglion, the upper and anterior part of the internal capsule, and the caudate nucleus. One artery of this set is large, and has been called by Charcot, “on account of its predominant rôle, in intra-encephalic hæmorrhage,” the artery of cerebral hæmorrhage. Now in both of these cases it is the territory supplied by these vessels which is involved. In case I, an artery could be distinctly seen leading to the spot of hæmorrhagic softening, which was probably of embolic origin, though the embolus was not found. The existence of mitral stenosis, together with a circle of vegetations along the faces of aortic semi-lunar valves, afford presumptive evidence in favor of this view. In case II, the lesion was hæmorrhage from