bullæ containing clear serum. The œdema was followed by a cyanosis of the skin covering the front of both feet. Later moist gangrene appeared and sloughing occurred. The lesions were remarkably symmetrical in every respect. At the *post-mortem* no arterial lesion was found to account for the condition.

Diarrhœa was, in the second case the first symptom, and this was followed in two days by œdema of the feet and legs, which in turn was succeeded by cyanosis. Bullæ next made their appearance, a large one being seen on the sole of the left foot. There was no corresponding lesion of the right foot. Gangrene of the toes was followed by two toes dropping off, and, notwithstanding a large ischio-rectal abscess, the patient for a time did well. At the end of nine months the œdema and cyanosis recurred in the right foot, gangrene of the moist type finally putting an end to life. The *post-mortem* showed marked endarteritis with consequent narrowing of the lumen of the femoral and popliteal arteries.

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5. Pathology of Insanity.

Symmetrical Apoplexy in the Region of the Cornu Ammonis in Epilepsy [*Symmetrische Apoplexie der Ammonshorngegend bei Epilepsie*]. (*Neur. Cbl.*, 1909, *Nr.* 7.) *Hermann, Dr.*

Meynert first drew attention to the pathological changes in the cornu ammonis in epilepsy. In most cases a condition of gliosis was found, which showed itself macrosopically in diminution and hardening, and microscopically in atrophic processes of the ganglionic cells and filling up of the spaces with neuroglia.

Until now only subjective opinions as to the primary or secondary nature of the change have been submitted, and some writers have assigned no special significance to the changes in the cornu ammonis, contending that they are only part of a gliosis common to the whole of the cortex. But there have been cases in which thorough microscopic investigation showed that the signs of gliosis were confined to the cornu ammonis, and while these cases give the impression of a primary, perhaps even a congenital disturbance, the cases described by Alzheimer and others in which a diffuse gliosis of the superficial layers of the cortex was found point to a secondary disturbance—more an explanation for epileptic dementia.

It is difficult to determine whether a primary or a secondary *rôle* should be assigned to other changes in the cornu ammonis. In older works we find cases quoted where there was serous softening, softening with redness, redness only, with spot-like extravasations of blood, all accompanied by venous hyperæmia of the brain. Death in these cases having taken place during coma or a fit, the conditions found may certainly be said to play a secondary *rôle*. Other cases are quoted where one or both cornua had developed tumours. Dot-like hæmorrhages in the grey matter of the cortex are often described, and may be likewise due to passive hyperæmia during a fit. Recent microscopic examinations have unfailingly discovered some of the vessels in the

process of gliosis, and in this area especially, if it is in the cornu ammonis, there is seen a new structure and increase of blood-vessels with thickened walls and abundant endothelial cells. The vessels are widened and filled with blood and blood-corpuscles. Hajos found, in early cases, miliary aneurysms in the cornu ammonis. He was of opinion that the breaking up of the vessels depicted an inflammatory process. He emphasised the fact that there was sometimes a serous softening in the cornu ammonis and its neighbourhood unlike gliosis, and he put special stress on the fact that this process, which he said was rare, confined itself to the cornu ammonis. From the development of miliary aneurysms to apoplexy is only a step. Formerly great importance was attached to overflow of blood in the cerebral meninges at the base of the fourth ventricle, and also in the cornu ammonis. In 1862, Hoffmann described two cases of capillary hæmorrhages in the cornu ammonis as the causes of death in two epileptics. Schröder van der Kolk mentions an old apoplectic cavity in the right posterior lobe, affecting a pillar of the fornix, the gyrus fornicatus and the uncus.

Among later writers, Orloff, in the case of a man, æt. 28, who, without fits or other physical signs, died in a state of coma, found extreme fulness in the vessels of the right and of the left cornu ammonis, and in the cortex of the left hippocampal fissure single torn vessels with fresh blood extravasation in the perivascular hollow. At the same time there was gliosis of the cornu ammonis, as also of the rest of the brain.

The case described by Dr. Hermann is that of a man, æt. 28, who had suffered from epilepsy since the age of twenty-three. In the course of left-sided exudative pleurisy with diffuse peritoneal tuberculosis, there was drowsiness on the third day, and the patient died in a state of coma, without signs of fits, dyspnœic or cardiac symptoms, on the fourth day

Post-mortem examination showed a red softening, the size of a hen's egg, in the neighbourhood of the cornu ammonis (left side), and numerous extravasations of blood, from the size of a pin-point to the size of a grain of rice, in the hard part of the cornu ammonis at the right side. Both hæmorrhages had a fresh appearance, and we may take it that the sleepiness resulted from hæmorrhage, the direct cause of which might be the large exudation with its pressure working on the upper vena cava. There were no clinical or anatomical signs of a larger engorgement, and all the more on this account the vessels of the cornu ammonis represent a *locus minoris resistentiæ*. Even if the disease and hæmorrhage of the vessels of the cornu ammonis are of a secondary nature, the relation of the cornu ammonis to genuine epilepsy on account of these conditions is quite apparent. HAMILTON C. MARR.

On the Pathology of Dementia Præcox and on the Acute Phases Present [*Sulla patologia della Demenza Precoce e sulle fasi acute che in essa si presentano*]. (*Riv. Sper. di Freniat, vol. xxxiv, fasc. iii, iv, December*, 1908.) *Pighini, G.*

The clinical unity of dementia præcox with its rich variety of forms is by many held to be one of the finest conquests of modern psychiatry, but it must be conceded that this unity is but the outcome of the happy constructive mind of an acute observer, and is not based on the recog-