CALCAREOUS DEGENERATION OF THE MYOCARDIUM.

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I AM inclined to record the following case, for although calcification of the cardiac muscle is by no means an uncommon condition, it is seldom that the process, either in extent or degree, reaches such an advanced stage. Its rapidity of development, as far as could be decided by ordinary clinical criteria, is also unusual.

CASE.

A. L., a male patient, aged 39, was admitted to the County Asylum, Whittingham, on February 7th, 1890, in a condition of maniacal excitement with delusions. The acute stage of his attack slowly and steadily subsided, but no definite improvement of his mental condition occurred. He became listless and apathetic, showing little interest and taking no part in the work or amusements of the ward, and ultimately dementia supervened.

Condition on Admission and Course.

On admission no anomaly of heart, lungs, or digestive system was apparent; the urine, of normal specific gravity, was free from albumen and sugar.

Until April, 1910, when he developed a cough, his physical condition had been relatively good. Then a systolic murmur was discovered in the mitral area; his sputum was examined for the tubercle bacillus with a negative result; a trace of albumen was present in the urine.

Subacute bronchitis was present on to May, 1911, when swelling of the feet and legs was noted. This ushered in a slowly advancing and finally a general oedema, in which condition the patient died on January 7th, 1912.

Necropsy.

Brain.—The venous sinuses were congested, the dura mater thickened, convolutions atrophied, lateral ventricles dilated and filled, ependyma congested. No haemorrhages into brain substance were present, although the basal vessels were atheromatous.

Lungs.—Bronchial mucous membrane irregularly thickened and congested; lower lobe of lungs oedematous.

Stomach and Intestines.—These were congested, but showed no other anomaly.

Liver and Spleen.—Congested and of very firm consistence.

Kidneys.—Congested, slight degree of fibrosis.

Heart.—This organ was large and weighed 450 grams. The aortic and pulmonary valves were competent, although slightly thicker than normal. The mitral orifice was markedly increased in size, the cusps thickened and firm; the tricuspid was affected similarly, but to a less degree.

The left ventricle was greatly dilated and hypertrophied and almost covered in its interior by a calcareous mass, between which and the mitral valve a large

thrombus was found. The accompanying photograph shows the extent of the process, from the apex of the cavity almost up to the attached edges of the cusps. On the surface the mass was soft; as it extended towards the apex it became progressively denser, and in its lower part (shown on the right-hand side of the photograph) was of the consistence and had the appearance of bone. The myocardium underneath was fibrous, and the photomicrograph (longitudinal section from the "bony" part towards the apex) indicates that the condition was advancing until the time of death.

The coronary arteries were atheromatous, and sclerotic patches appeared on the aorta.

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Fig. 1.—Calcareous degeneration of left ventricle. $\times 2$.

Fig. 2.—Longitudinal section from calcified area towards apex. $\times 150$