

<일반연제 1-5>

ULTRASTRUCTURAL CHANGES IN CHRONIC MYOCARDIAL ISCHEMIA.

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Patients with multiple episodes of ischemia persisting for years (=chronic ischemia) show regional left ventricular dyskinesia. Transmural needle biopsies were obtained from coronary heart disease at the time of bypass surgery or cardiac transplantation and investigated for morphological changes by electron microscopy. Electron microscopy showed hypertrophic as well as atrophic cells with a lot of ultrastructural changes include bizzare nucleus, small mitochondria, extensive distribution of lipofuscin, loss of contractile elements, contracture bands, appearance of unusual sarcoplasmic reticulum with ribosomes, destruction of cytoskeleton, accumulation of fluid, damage in microvessels, infiltration of phagocytic cells and extracellular fibrosis. These changes may be followed by regional left ventricular dyskinesia or akinesia.