601 Right Ventricular Hypertrophy in the Pneumoconiosis of Coalminers. A. J. Thomas. Brit. Heart J. 13, 1-9 (1951).

A series of 50 hearts from cases of coalminers pneumoconiosis have been dissected and the ventricular weights recorded. The ratio of left ventricle to right ventricle, LV/RV ratio, shows a great reduction, and there is a consistent relative increase in the weight of the right ventricle. A cardiographic study of 146 persons (normal men, miners and non-miners, and patients with all stages of pneumoconiosis) has shown that V6 changes most with increasing severity of lung disorder. In the most severe groups the R wave of V6 is diminished and the S wave is increased in amplitude. A suggestion is made that a lead from the third interspace immediately above V2 may help in the diagnosis of right ventricular hypertrophy when it shows an r' wave of 4 mm. or more in height. Certain effects of respiration on the electrocardiogram are described, particularly the respiratory variation of the chest leads on the right side. This is presumed to be a positional change, but some findings suggest that the mechanism of respiratory variation should be further investigated in relation to respiratory function.

-- Author's summary (Bull. Hyg.)

602 Factors Favoring Phagocytosis by Reticulo-Endothelial Cells Early in Inflammation. Edna H. Tompkins and Mary A. Grillo. Am. J. Pathol. 29, 217-231 (March-April 1953).

The reticulo-endothelial cells of subcutaneous tissues, the so-called resting-wandering cells, represent active defenders in the first 12 hours of inflammation. They become activated in preparation for phagocytosis by contraction, excretion of fluid from their "fluid vacuoles," and changes in the consistency of their cytoplasm. Once activated, they are aided in making contact with particulate substances and are supported in "surface phagocytosis" by the movements of the underlying muscles and of the infiltrating ameboid polymorphonuclear cells. They carry the burden of phagocytosis before arrival of the polymorphonuclear cells; and they alone must phagocytose for about 12 hours the many invading substances that are not phagocytosible by the polymorphonuclear cells.

-- Authors' summary

603 Dust Diseases. G. E. Spencer. Bull. Allegheny Co. Med. Soc. 42, 389-391 (April 25, 1953).

This brief paper gives advice to family physicians to whom x-ray films from a mass survey have been referred when pneumoconiosis is indicated. Survey physicians do not attempt to differentiate the dust diseases, merely reporting the findings as "pneumoconiosis." It is the responsibility of the family physician to determine which of these diseases is present, and to decide what should be done. After miliary tuberculosis, carcinomatosis, certain fungus diseases, and siderosis due to organic disease are excluded, the various pneumoconioses must be considered. Anthracosis, silicosis,