981 In Vivo Method for Detecting Antimony Deposits in the Lung by Differentiated Absorption of X-Radiation. R.I. McCallum and M.J. Day. Lancet 2, 882-883 (Oct. 30, 1965).

The pneumoconiosis of antimony process workers is probably a benign condition because all of the metal is not retained in the lungs, a small amount being constantly excreted in the urine. Fumes of antimony oxide are given off during the refining process. Thus far, fibrosis has not been demonstrated in the lung as a result of this inhalation. Some employees exposed to antimony and zirconium, two of whom had been exposed to antimony only, were studied. The radioactive isotope iodine 125 was used. The K electrons (K alpha and K beta) were measured by scintillation counter between the source and the subject and distal to the subject. Readings were made on a regular pattern over both lungs. Both of the men who had been exposed to antimony only had definite evidence of antimony deposits in the lung. The three men who had been exposed to a mixture of dusts had no such evidence, nor had the three men whose only exposure was to coal dust. This method of differential absorption of roentgen radiation may be used to detect any metal of high atomic number deposited in the body. -- Am. Rev. Resp. Dis. Absts.

982 Roentgenologic Patterns in Long-Standing Beryllium Disease. A. Weber, J. Stoeckle, and H. Hardy. Am. J. Roentgenol. Radium Therapy Nuclear Med. 93, 879-890 (April, 1965).

The development of unusual roentgenologic patterns in patients with long-standing beryllium disease is described. These patterns are illustrated by eight patients who were observed for up to 18 years. The pulmonary changes consisted of granular, ill defined nodular and linear densities occurring singly and in combined forms. Lymph node enlargement, slight to moderate in degree, accompanied these lung densities in six of the eight patients reported. A mixed pattern of granular and nodular densities was most commonly seen. In one patient, the persistence of granular densities alone, unchanged over a period of 18 years, is a most unusual pattern and rarely observed. That calcification of different densities may take place in beryllium disease is not generally appreciated. This finding has been observed in several cases. The extent and degree of nodular calcification vary. Pathologic studies reveal that such calcification of nodules may be present although not seen on roentgenograms. Small and scattered linear densities often develop in the course of years. In advanced cases, linear densities may be very marked and associated with contraction of segments and lobes, conglomeration of nodular densities, and emphysema with bullae formation. Such roentgenologic changes most frequently involve the upper lobes. In contrast, similar fibrotic changes confined to the lower lobes are very rarely seen. The formation of large bullae in the lower lobes is likewise very infrequent. When hemoptysis occurs, the question of whether such cysts are tuberculous cavities becomes a clinical issue. In three well studied cases an acid-fast infection was ruled out completely. Concomitant with the fibrotic and emphysematous lung changes, there may be a diminution in the number of granular and nodular densities to a point where a roentgenologic diagnosis of beryllium disease is not considered. -- Am. Rev. Resp. Dis. Absts.

983 Copper Intoxication. Report of a Case with Observations on Ceruloplasmin. N.A. Holtzman, D.A. Elliott, and R.H. Heller. New Engl. J. Med. 275, 347-352 (Aug. 18, 1966).

A case of copper intoxication that followed repeated debridements of burned skin with copper sulfate crystal is reported. The manifestations of intoxication included jaundice, hemolytic anemia and oliguria. There was a leukocytosis and transient elevation of serum glutamic oxalacetic transaminase and cephalin flocculation. Serum and urine copper concentrations were elevated. After the administration of pencillamine the cupriuria increased whereas the total serum copper declined. There was a striking increase in the concentration of serum ceruloplasmin, which fell less slowly than total serum copper after penicillamine therapy. It is suggested that the elevated ceruloplasmin resulted directly from the increased body copper. The significance of this to copper transport in normal persons and in patients with Wilson's disease is discussed. There are 43 references. -- Authors' summary

984 Nephropathy in Chronic Lead Poisoning. J.M. Morgan, M.W. Hartley, and R.E. Miller. Arch. Internal Med. 118, 17-29 (July, 1966).

Thirteen patients have been studied because of known chronic lead exposure or because of renal failure without apparent cause. A common picture has emerged consisting of anemia, normal or decreased renal size and function without definite urinary findings or infection, strong evidence of excessive past lead absorption, and a very protracted course, frequently complicated by hypertension and joint disease. In the majority of cases, renal biopsy showed focal or diffuse interstitial fibrosis with an impressive paucity of inflammatory infiltrate, tubular degeneration with intranuclear inclusions, and an unusual fibrosis of the adventitia and media of the small arteries. There is strong supportive evidence from the literature that such a syndrome might be due to chronic plumbism. There are 36 references. -- Authors' summary