

270 Asbestosis and Abdominal Neoplasms. E. E. Keal. *Lancet* 2, 1211 (1960).

In 1953, an impression was formed at the London Hospital that women suffering from pulmonary asbestosis had ovarian neoplasms more often than other women. On the basis of this suspicion and because of the occurrence of other cases, the hospital records since 1948 were investigated. During that period, 23 women and 19 men were admitted with a diagnosis of asbestosis. In this series, there were 30 deaths (15 men and 15 women). Of these, 14 die with lung cancer (10 men and 4 women). This high incidence in men is partly due to selection but this does not apply to the women, who were all non-smokers. Death occurred in one man with peritoneal cancer and in 9 women with ovarian or peritoneal cancer. This appeared to be more than a chance association, and spread from undiagnosed lung cancer seemed unlikely. At least 4 of the tumors were not of ovarian origin. Some evidence of hematogenous spread of asbestos fibers was adduced and it was suggested that a combination of mechanical and chemical factors may determine the peritoneum as the site of inflammatory and subsequent neoplastic change. No single satisfactory explanation for these cases could be drawn from the available material though they appeared to form a clinical entity of statistical significance.

-- Can. Med. Assn. J. Absts.

271 Occupational Medical Investigation in Cement Works. Jenny M. Battig, et al. *Schweiz. med. Wochschr.* 90, 705-709 (June 25, 1960). German.

This is the first systematic investigation in Switzerland into the possibility of respiratory complaints arising from the inhalation of cement dust. No free silica is present in Swiss cement, so silicosis is not a risk, a fact confirmed by the radiological examination of some of the workers. In all, 488 employees at 3 factories were studied. The absentee rate at one of the factories was much higher than at others; the percentage of men complaining of cough and of those with sputum was also higher in this plant. The cause of this might be part due to social factors, epidemics, etc. A study of smoking habits shows that exposure to cement dust does not increase coughing in smokers. It is suggested that those who are resistant to smoker's cough are also resistant to dust. Non-smokers show a surprisingly high proportion with chronic cough as compared with figures given by another author. Perhaps a better comparison would have been with a non-occupational group studied by the authors themselves. However, it is concluded that this shows that cement dust is irritating to the respiratory passages. Physical signs found did not lead to any definite conclusion. Vital capacity was not influenced by the length of dust exposure. In a few workers the maximum expiratory force was reduced. An attempt was made to relate the findings to the intensity of exposure by dividing the workers into 3 groups. The 2 groups most exposed to dust showed a tendency to increase pathological signs, but the difference was not statistically significant.

-- Bull. Hyg.

272 A Study of the Physiological Effects of Carbon Black. (3) Adsorption and Elution Potentials: Subcutaneous Injections. C. A. Nau, J. Neal and V. A. Stembridge. *Arch. Environmental Health* 1, 512-533 (Dec. 1960).

Neither blood plasma nor gastric juice elutes any significant adsorbed component when a channel black is suspended in either medium for as long as 7 days. Neither blood plasma nor gastric juice elutes any significant adsorbed component when a furnace black is suspended in either medium for as long as 7 days. Channel black "binds" benzpyrene adsorbed "artificially" so firmly that it cannot be removed "in toto" by benzene extraction. No significant extraction of either channel or furnace carbon black was accomplished with gastric juice to which 10% cooking oil was added when contact was maintained for 7 days. Subcutaneous or intraperitoneal injection in mice of channel or furnace carbon black leads to no significant changes from the normal. Benzene extractives of furnace blacks when injected in oil into mice lead to tumor formation. Carbon blacks, channel or furnace, can absorb and bind known carcinogens so effectively that no tumors are produced when the adsorbed material is injected subcutaneously. Tricaprylin when injected subcutaneously in mice may cause tumor formation.

-- Authors' conclusions