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PERITONEAL TUMOURS IN ASBESTOSIS

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Eleven cases of diffuse abdominal tumours in association with exposure to asbestos were discovered in the years 1958 to 1963. There were eight men and three women, all of whom had worked at the same factory. In seven of the men the age at death ranged from 38 to 78 years; one man is still alive at the age of 46. The women died at 44, 61, and 67. The survival time after the first exposure varied from 20 to 46 years. The shortest period of exposure was 10 months and the longest 32 years. All three of the main commercial types of asbestos had been involved in their working operations. Histological confirmation of the nature of the tumour has been obtained at necropsy in nine of the 10 deceased and at biopsy in six, including the survivor. A remarkable feature of these cases is the minimal fibrosis found in the lungs. In three men and one woman, asbestosis was not diagnosed during life, and no patient was completely disabled by pulmonary fibrosis.

Von Rokitansky in 1854 described primary tumours of the peritoneum which he called 'colloid cancer'. The first case of malignant primary peritoneal tumour reported in this century was described by Miller and Wynn (1908). Since then a considerable number of such tumours has been found. Winslow and Taylor (1960) reviewed the literature and found 13 cases diagnosed as primary peritoneal malignancies in which clinical and pathological data together with complete necropsy reports were recorded. They added 12 more from the files of the U.S. Armed Forces Institute of Pathology. In only one of their cases was evidence of exposure to asbestos demonstrated, although sections from the lungs were examined in each case (personal communication).

An association between asbestosis of the lungs and tumour formation was first reported by Lynch and Smith in 1935. Gloyne (1951) reported at necropsy a 14·1% incidence of tumours in asbestotics, all of which were carcinoma of the lung. Wagner, in a series of recent publications (Wagner, Sleggs, and Marchand, 1960; Sleggs, Marchand, and Wagner, 1961), has reported a large series of tumours of pleural mesothelium in association with exposure to asbestos. In 1954 Leicher reported an abdominal tumour in a patient with pulmonary asbestosis and thought that asbestos was also present in the tumour. Bonser, Faulds, and Stewart described in 1955 a series of 72 necropsies on asbestotics in which four cases of abdominal neoplasms were found. In a cohort of 1,495 asbestos workers Mancuso and Coulter (1963) found five neoplasms of the peritoneum among members who died at ages from 25 to 64 years, compared with an expected incidence of 0·08. Selikoff, Churge, and Hammond (1963) reported one case of diffuse peritoneal mesothelioma in a group of 632 asbestos workers who had been exposed for at least 20 years in industry. Among 42 cases of asbestosis at necropsy Keal (1960) found 11 cases of abdominal tumours arising at various sites. One of Keal's asbestotics with peritoneal tumour was known to us. Heard and Williams (1961), reviewing pathology and lung function in asbestosis, described a subject with a peritoneal tumour who was also known to us. In this paper we refer to these two cases and describe nine others not previously reported.

Source of Material

Certified cases of asbestosis must be reported to H.M. Coroner at death under the Births and Deaths Registration Act 1953. Necropsy follows as a matter of routine. There is widespread knowledge of the hazard in the local working community. Industrial death benefit under the Industrial Diseases Regulations of 1948 is payable if asbestosis is shown to be the cause of death or a material contribution thereto. For these reasons many other workers in this section of the industry who die at home or in hospital from

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