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PULMONARY ASBESTOSIS

V. A REPORT OF BRONCHIAL CARCINOMA AND EPITHELIAL METAPLASIA ¹

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Following our report in 1935 (1), some further interest in the occurrence of lung cancer in asbestosis has been manifested. Six cases have been recorded, by Gloyne (2, 3), Egbert and Geiger (4) and Nordmann (5). The present report brings the total to 8. Nordmann believes that these cases should be classified as occupational cancers.

In 1938 Anderson and Dible (6) studied the silica content of the lungs and the histologic evidence of pneumoconiosis in 70 persons who died of pulmonary carcinoma and in 50 non-cancer subjects. A greater incidence of silicosis and a greater lung silica content were found among those who had cancer than in the control series, from which the authors conclude that the rôle of the silicosis is etiological.

Vorwald and Karr (7), also in 1938, reviewed the reports of carcinoma of the lungs in subjects of pulmonary dust disease and reached the conclusion that no relationship has been shown between the inhalation of dust and the occurrence of cancer and that, except as it contains known carcinogenic factors, such as tar or radium, dust cannot be considered as of etiologic significance in malignant disease of the lungs.

In 1939 Klotz (8) reported that from 1925 to 1936 there occurred in his necropsy service 50 cases of silicosis, among which were 4 instances of bronchiogenic carcinoma, an incidence of 8 per cent, while in his total of 4500 necropsies for that period there were 53 primary cancers of the lung, an incidence of only 1.18 per cent.

It was soon after reporting the first case that the writers encountered a second.

A white man first presented himself in the dispensary at the age of forty-two. He had then been employed as a weaver in an asbestos mill for seven years. His complaints were shortness of breath and lassitude. No other significant symptoms were elicited. There were somewhat diminished expansion of the left chest and dullness in the left axilla and in the right base posteriorly. A few râles were heard in these areas and in the upper right axillary region and the left base posteriorly. The roentgen report at that time is as follows: "Bronchial lines slightly heavier in the left chest but not sufficient to warrant a diagnosis of tuberculosis." No tubercle bacilli were found in the sputum and serologic tests for syphilis were negative.

The patient was not seen again until six years later, when he was complaining of shortness of breath and soreness in the chest. He had continued to work in the asbestos mill, giving him a total of thirteen years' exposure to asbestos dust. He stated that he had been gradually becoming weaker, more easily fatigued, and shorter of breath for about two years, and had developed a cough, productive of thick phlegm but no blood. For about a year he

¹ Read before the American Society for Cancer Research, Richmond, Va., April 5, 1939