

sible as the great improvements made in recent years, in the prevention and therapeutic control of tuberculosis, have resulted in a remarkable reduction of the mortality from this infection, and in a diminution of the number of the more severe tuberculous lesions in the lung, including cavity formation.

2. Syphilitic bronchial scars and other nonspecific bronchiectatic formations have furnished allegedly, in a few instances, the soil in which pulmonary cancers developed.

3. Late bronchial changes, following an influenza infection and characterized by atypical, metaplastic, epithelial proliferations of the bronchial mucosa, have supplied the basis for the contention that the recent increase in pulmonary neoplasms is related etiologically to the influenza epidemic which ravaged the world in the years 1918 to 1919 (Askanazy; Schmidtman; Winternitz; Berblinger; Mayer; Peek; and Probst). Winternitz went so far as to predict in 1920 the rise of lung cancers in the years following, because of these bronchial lesions which he observed as frequent sequelae of influenza. This assumption was not confirmed by other investigators from an analysis of the precancer history of their cases (Gottstein; Seyfarth; Staehelin; Kikuth; Mönckeberg; Brechwoldt; Hanf; and Syrek). Hueper pointed out that a similar increase of lung cancer did not follow the great influenza epidemic of 1888-1889, and that the beginning of the present increase started many years before the influenza epidemic of 1918-1919. The actual existence of such an interrelation becomes still less probable in view of an observation made by Kerlev (cited by Matz). He found that the inhabitants of Iceland are free of lung cancer in spite of the fact that the influenza epidemic was exceptionally severe on this island.

An evaluation of the evidence available on the causative significance of bacteriotoxic agents regarding pulmonary malignancy permits the following conclusion. These agents or the conditions set up by them in the lung may have been responsible for, or may have contributed to, the development of some isolated cases of lung cancer. The majority of these tumors have no connection with them, and the recent increase in pulmonary neoplasms is entirely unrelated to them.

b. CHEMICAL AGENTS

Numerous chemical substances of well or ill defined chemical nature and of occupational or non-occupational character have been incriminated in causing, contributing to, or precipitating the development of pulmonary malignancy, and in having some share in the recent rise of these neoplasms. The great number of substances, their marked diversity in character, and the many contradictory opinions expressed as to their causative significance reflect the high degree of uncertainty existing in regard to the potential carcinogenic action of many of these agents. Some investigators stated that the analysis of their case histories did not furnish any evidence supporting the conception,