

of some specific or nonspecific endogenous or exogenous factor (solar rays, roentgen-rays, tar, and arsenic) during the postfetal period of life (Nemenow; and Koelsch). The prevalence of the various organ cancers at different age periods is fitted into this conception by assuming that different tissues undergo senescent changes at different age periods (Burkard; Macklin; Little; Wells; and Pollard).

Wells contended that "placental tumors occurring as they do in fetal tissues, may not be an exception to the rule that from one fifth to one tenth of the life cycle of an organism ordinarily is required to produce a malignant growth, since the placenta is an organ the entire life cycle of which terminates in senility in about six months." However, this relation is non-existent in regard to most of the other malignant neoplasms observed in early childhood. An approximate idea about the way such a hypothesis works out in regard to post-fetal neoplasms may be gained from a list of different organ cancers arranged according to the incidence maximum at certain age periods (Holtz): 0-4 years, testes, kidney, and suprarenal; 15-25 years, bones; 30-35 years, testes; 40-50 years, brain; 50-55 years, female sex organs; 60-65 years, skin, and abdominal organs; and 70 years and more, prostate. Everybody would develop a cancer in some organ, according to this dogma, if he lived long enough (Burkard; and Macklin).

The senescence theory of cancerigenesis forms the basis for the statistical calculation, through which the appreciable increase in the absolute incidence of malignant tumors observed during recent decades is related etiologically to the coincidental rise in proportion of older age groups in present-day population (Haubold; Burkard; Crawford-Dunlap; Peller; and Jung). While it is often conceded that simultaneous improvements in diagnostic methods and general medical care doubtlessly contributed to some degree to this increase, by leading to the discovery of a larger number of malignant tumors than was previously the case, statistical data indicate that cancer death rates standardized for age showed from 1911 to 1935 a large increase. Those related to cardiac diseases, chronic nephritis, and cerebral hemorrhage, all of which, like cancer, are diseases of the older age groups, did not (Dublin and Lotka).

There is a progressive rise in cancer mortality with the advancement of age (Dublin and Lotka; and Gover), in spite of the fact that cancer is not a disease of old age, but more of the late middle age; as 60 per cent of all deaths from cancer in women and 50 per cent of all cancer deaths in men occur from 30 to 60 years of age (Haubold; Dorn; and Wells). It is maintained that the biological cancer menace has grown in recent times in the same measure as the group of cancer-susceptible old people increased (Blumenberg).

Attempts have been made to obtain supporting evidence for the senescence theory by pointing to the differences in the latency period of experimental cancers in various species of animals, which are claimed to parallel the variations in their normal life spans (Passey; Wells; Findlay; and Wood). It