

confines of laboratories and explore other fields less cultivated in search for its cause or causes. United action on a large scale, embracing enthusiastic investigators of all nations, concerning the influence of heredity, age, race, climate, diet, habits, trauma, prolonged irritation, chronic inflammation, scar tissue and benign tumors in the causation of the disease, could not fail in bringing more light on this perplexing subject.

*Heredity.* The influence of heredity in the etiology of carcinoma is unquestionable. Every surgeon of large experience has observed cases in which the disease could be traced through several successive generations. The percentage of cases in which carcinoma has been shown to be hereditary is estimated at from 12 to 33 per cent. by different authors. More extensive and accurate statistics from all available sources are needed to prove the influence of heredity in the etiology of carcinoma. In studying the influence of heredity, it is not fair to exclude from the statistics distant cancerous relatives, as has been done by Cripps and others, because it is well known that congenital deformities, physiognomy and mental peculiarities frequently reappear several generations apart and in distant relatives. There is no reason to doubt that at least a predisposition or aptitude for carcinoma is transmitted in a similar manner.

*Age.*—It is a familiar fact that advanced age plays an important role in the etiology of carcinoma. Of the 9,906 cases collected by De la Camp, there was only 19 less than 20 years of age. I have seen a carcinoma of the mammary gland in a girl, 21 years of age; a carcinoma of the rectum in a boy of 17, and several cases of carcinoma of the stomach in persons between 25 and 30 years of age. There appear to be conditions, local or general, antagonistic to carcinoma during the most active physiologic processes concerned in the growth and development of the body, and the disease manifests a special predilection for the aged when all the active processes in tissue formation are on the decline. Age has also a decided influence on the clinical course of carcinoma, as it is well known that its malignancy diminishes with advancing age. The senile state favors the development of the disease, but exercises an inhibitory influence in its progress, while, on the other hand, the juvenile tissues are antagonistic to it, but when it does occur to young subjects it pursues an unusually malignant course. The influence of age on the prevalence and malignancy of carcinoma merits more careful study in