

disease at the Skin and Cancer Hospital, New York, between 1926 and 1928 (11 gas house workers, 1 coke-oven tar worker, roofers).

In a study of occupational cancers observed at the Memorial Hospital between 1917 and 1930, Haagensen reported 20 cases of tar and pitch cancer. In a recent investigation on the etiologic relationship of occupation to malignancies of the eye and its adnexae, Lane (1938, 1939) pointed out that workers in tar and pitch exhibit an excessive liability to neoplasia of the ocular adnexae, especially of the lids. Foerster and Schwartz (1939) found that the workers of several plants in which tar and pitch were handled (manufacturers of electric conduits, roofing paper factories, and tar distilleries) frequently suffered from tar dermatitis and melanosis as well as keratoses and papillomas. However, the two cases of cutaneous malignancies observed by these investigators among the examined tar-workers were attributed to causes other than tar and pitch. This conclusion appears rather unlikely considering the reportedly high incidence of precancerous cutaneous lesions caused by contact with tar and pitch among the workers studied.

No claim is made that the data regarding the incidence of tar and pitch cancer following an industrial exposure are complete; but they are sufficiently comprehensive to permit approximate comparisons as to the relative frequency of these neoplasms in different countries and continents. It is evident that the number of tar and pitch cancers observed in these various regions depends to some extent upon the size and diversity of the industrial establishments producing and handling tar, pitch, and related compounds.

However, the conditions existing in England and Wales indicate, that apart from this factor connected with the regional distribution and size of tar industries, there must be present in these countries a special, predisposing factor, which is probably related in part to the chemical character of the coal used for the production of tar and pitch. It may be attributed in part to the use of ineffective technical and sanitary precautions and of production methods different from those employed in some continental countries. The combination of these factors may account for the marked prevalence of this industrial neoplastic disease in the British Isles. Some credit may also be given to the existence of governmental supervision and obligatory notification of these cutaneous lesions to the Home Office (in force since 1920), since these measures may have added to a more frequent recognition of the high incidence of these tumors observed in England.

On the other hand, the data from some continental European countries are somewhat doubtful as to reliability and completeness. It is clear, that no country has data available, especially preceding 1925, which reflect even approximately the actual incidence of these tumors among the working population. When Pedley asserts that tar and pitch cancer is more common in England and on the European continent than in North America, it must be noted that this statement is correct concerning England, but not continental