

according to this investigator, more often caused by the effects of complicating infections and exhaustion than by metastases.

The prognosis is good for early cases of oil and paraffin cancers, and is for locally advanced tumors relatively favorable, as neoplasms of this type can be successfully treated with local excision without being followed in many instances by the appearance of recurrences or regionary metastatic growths (Southam; and Scott).

In the presence of glandular involvement, the outlook is considerably worse and recurrences are liable to occur after treatment of the primary lesions. The ultimate prognosis is aggravated by the fact that second primary tumors may develop after the successful eradication of the first cancer, and that such neoplastic developments may take place many years after the cessation of exposure to the injurious agents (Küntzel). The prognosis of oil and paraffin cancers of the skin follows the general rules, that is, it depends upon the stage at which the tumor is properly diagnosed and adequate treatment instituted.

The final outcome of many of the cases recorded was aggravated by the fact that the workers came under medical care at a late stage of the disease. Ignorance, negligence, and bashfulness, in addition to poverty, contributed to this attitude assumed by many workers, especially when the cancer involved the scrotum. It is, therefore, not surprising that the mortality from oil and paraffin cancer among the cases placed on record is relatively high, particularly during those periods in which medical supervision of the oil- and paraffin workers was either entirely absent or very deficient. Eckardt stated in 1886 that death was caused by recurrences or metastases in five out of eleven paraffin cancers observed, two additional cases were considered cured, while of four other cases the ultimate fate was unknown. During relatively recent years, a high mortality from oil cancer has been reported to be prevalent among the members of especially exposed groups of workers. Irvine mentioned that the comparative mortality figure for skin cancer from 1920 to 1923 in cotton spinners was 16 times higher than that of the general occupied and retired male population in England.

The following additional data on this subject were culled from various English sources: From 1920 to 1931 and 1933 to 1937, there were 45 notified cases of paraffin epithelioma of which 6 were fatal; during the same periods there were recorded with the Inspector of Factories and Workshops 924 cases of mule spinners' cancer of which 298 ended in death; while of 144 oil cancers among workers of other industries, 78 cases had a lethal outcome. In a treatise by Henry, dealing with fatal cases of occupational scrotal cancer, this investigator stated that there were, from 1911 to 1935, 877 notified cases of mule spinners' cancer, of which 449 were fatal (345 of these tumors involved the scrotum). Part of the cases of this series, while living at the time