

314 OCCUPATIONAL TUMORS AND ALLIED DISEASES

Peller called attention to the fact that occupations with tar contacts exhibit an elevated incidence of skin cancer and cancer of certain internal organs (stomach, intestine, alimentary glands, and urinary organs), showing, at the same time, a lowered frequency of cancer of the lip, tongue, and esophagus. The following compilation was offered in support of this claim.

Site of Cancer	Social Class V o/oooo	Special Members of Class V Having Con- tact with Tar, with CONSIDERATION OF Same Age Grouping*
Skin	8.6	62.8
Lips, tongue, and esophagus	37.7	22.6
Stomach	50.3	57.1
Other organs	122.0	159.2
	218	302

* Spinners, gas stokers, and chimney sweeps.

Peller mentioned that similar differences in the incidence of cancers of the digestive tract exist in social class IV in regard to its members employed in alcoholic trades. The statement of Peller, concerning the excessive incidence of cancers of the digestive organs in individuals exposed to tarry substances, is somewhat confirmed by an observation of Kennaway in connection with malignancies in chimney sweeps. Kennaway noted that among 65 cancers found in chimney sweeps, from 1910 to 1912 in England and Wales, 18 affected the scrotum and penis, while 83 per cent of the non-scrotal cancers were located in the alimentary system. An unusually high incidence of gastro-intestinal malignancies was found by Teleky among chromate workers (5 gastro-intestinal cancers among 44 deaths). A similar claim was advanced by Turner and Cole in regard to workers employed in smelting plants.

These incomplete statistical data may suffice to illustrate the uncertain and contradictory character of the evidence obtained in regard to the occupational incidence of alimentary malignancy. General agreement seems to exist upon one point; namely, an excessive frequency of cancer of the digestive organs is present in individuals exposed for occupational reasons to tar or tarry products.

3. TUMORS IN THE VARIOUS ORGANS OF THE ALIMENTARY SYSTEM

a. LIPS

Carcinoma of the lip is characterized by three outstanding features: 1. It is more common in men than in women (ratio 10 : 1) (Fricke; Lane-Clayton; Eggers; Wile and Hand; Elliot; Kelly; and Hyndman); 2. The predominant