

cancer is high, suggested that the same compound might produce both cancer of the skin and of the bladder.

The apparent correctness of this assumption is supported by the observation of bladder cancer in two patent-fuel workers, following the primary development of carcinomas of the skin. Two similar cases were reported by Posner, who saw the combination of scrotal carcinoma and bladder carcinoma in tar workers. A third and fourth case of this type was placed on record by Young and Russell, and O'Donovan, respectively. Bladder cancer in briquette workers was noted also by Sladden. Roesch cited Goldschmidt as having observed a carcinoma of the bladder in a paraffin worker, who had simultaneously a carcinoma of the skin of the upper arm, and a third primary carcinoma of the stomach. The occurrence of bladder cancer in paraffin workers apparently is not extraordinary, as Müller contended that in all cases of this type reported the paraffin workers had been employed previously in aniline factories. The observation of two cases of bladder cancer in tar workers by Sieben is of special interest, as this author emphasized the fact that the two workers did not show any symptoms of chronic arsenic poisoning. The occurrence of a bladder papilloma associated with an ureter papilloma in a gas-plant worker was recorded recently by Renner. The absence of an excessive incidence of bladder tumors in gas-plant workers was attributed by Simon to the existence of good sanitary conditions.

In view of the fact that many of the substances which were held responsible for the above mentioned occupational type of bladder tumor have been incorporated directly, or in a more or less modified form in many foodstuffs, medicinal and cosmetic preparations, or have been used to color toys, paper, wearing apparel and numerous other articles to an ever increasing degree during the last fifty years, it seems to be justified to speculate upon what role these substances may have played in the apparent increase of bladder cancer observed during the same period (Posner). Gurlt recorded only 66 tumors of the bladder (0.39 per cent) among 16,637 tumors occurring at the hospitals in Vienna during 1858 and 1879. During a similar period Hasenclever saw only 3 primary bladder cancers in 7,000 autopsies. An incidence of 0.76 per cent of bladder tumors among hospital patients with neoplasms was reported by Kuester in 1891. The death rate among the population of Basel rose, according to Müller, from 0.007 per cent during 1871 to 1880, to 0.02 per cent during 1901 to 1910, thus, showing a definite and appreciable increase since the establishment of the dye industry in this region. Bollag reported that the relative as well as the absolute incidence of bladder tumors in Switzerland had increased in recent times during successive decades. The mortality rate from bladder cancer represented 1.3 per cent of the total cancer death rate between 1905 and 1910. Surveying the period 1901-1910, Leuenberger, stated that 2.8 per cent of all tumor cases treated (570) in the hospitals of Basel were neoplasms of the bladder.