

misnomer, since it was shown later on that not only several other aromatic amines, but also related aromatic compounds, may exert a similar blastogenic action upon the urogenous organs. The terms "amido-tumors" or "nitro-tumors" were proposed by Oppenheimer in 1926 as more appropriate, but the name "aniline tumor" has remained the more generally used designation for tumors of the urogenous system caused by the occupational exposure to aromatic organic chemicals.

I. GEOGRAPHIC DISTRIBUTION AND INCIDENCE

"Aniline tumors" belong to that group of industrial neoplasms which have become more widespread during recent decades, following the development of coal-tar dye industries in countries in which such establishments were absent or of minor extent until lately. Therefore chemical occupational tumors of the urogenous organs, especially the urinary bladder, have been observed almost exclusively in countries possessing for some time large chemical plants.

The first industrial neoplasms of this type were reported in 1895 by Rehn in Germany, where the manufacture of coal tar dyes was started around 1860; Germany supplied before 1914 more than 80 per cent of the world production of aniline, its derivatives and related aromatic amines. More than 300 cases of aniline tumor of the bladder have been observed in Germany since that time (Baader; Rehn; Leichtenstern; Nassauer; Oppenheimer; Lewin; Bardenheuer; Bachfeld; Curschmann; Schwerin; Engel; Bauer (Th.); Brezina; Sebening; Seyberth; Sieben; Simon; Straus; Ullmann; Teutschlaender; Buettner; Arnstein; Posner).

The chemical plants located around Basel (Switzerland), which were established at about the same time as the German chemical factories, furnished the only other source of these neoplasms before World War I. The first cases from Switzerland were reported by Schedler in 1905. Their total number at the present time amounts to over 80 (Leuenberger; Mueller; Henschen; Barkmeyer). When, during and after the Great War, chemical factories were founded and developed to large scale production also in other parts of the world, aniline tumors soon made their appearance in other countries.

The first information as to the occurrence of bladder tumors in dye workers in England was offered in 1918 by Ross. This investigator stated that fourteen cases of villous growths had been observed, according to a report of the Chief Inspector of Factories, in a works where the men were engaged in handling aniline dyes made there. Young and Russell in 1926 noted that there was an excess of bladder tumors among workers of chemical factories and textile dyeing establishments in England. Bridge and Henry in 1928 stated that twelve fatal cases of bladder cancer had occurred among chemical workers since 1924. Three years later Henry, Kennaway and Kennaway recorded 61 fatalities of bladder cancer among chemical workers (dyers, dye