

The total number of reported cases of occupational roentgen- and radium-cancers of the skin from all countries is approximately 125, of which three cases only were caused by an exposure to radioactive substances. It is needless to state that this figure is evidently appreciably below the actual one, as the data concerning the incidence of this medical professional disease are notoriously incomplete and inaccurate (Hess; Cole; Ledoux-Lebard; Rosenbach). This deplorable situation has not been ameliorated unfortunately by the recent compilations of Brown and of Meyer concerning the deaths of roentgenologists, technicians, nurses, and engineers from an occupational exposure to roentgen- or radium rays. Brown collected 28 fatal cases of occupational roentgen-cancer which were observed in the United States between 1895 and 1935. Meyer listed in addition to Brown's series the names of 166 martyrs, many of whom died from malignant sequelae of an actinic causation. The situation existing, especially during the early years, is illustrated by a statement made by Rowntree in 1922, who noted that practically every roentgenologist who suffered from roentgen-dermatitis during 1899 to 1906 ultimately developed cancer. It may be mentioned that Saunders and Montgomery emphasized that their recent figures on the incidence of chronic radio-dermatitis and roentgen-cancer could not be considered as final, as the latency period in some of their cases was too short for a malignant complication to develop.

In addition to these cases of occupational roentgen- and radium-cancer there exists an ever increasing number of therapeutic carcinomas of this genesis. Dohan and Kienböck estimated that there were several hundred cases in 1922. If this estimate is correct, it would indicate that the majority of these cases have not found their way into the literature. The following case reports were published: Wyss (1906) one case; Lindenborn (1908) two cases; Rosenbach (1910) one case; Klemperer (1911) one case; Hesse (1911) twenty four cases; Bichler (1914) one case; von Haberer (1921) one case; Hazen (1921) one case; Appelrath (1925) one case; Lane (1930) one case; Laborde (1931) three cases; Holthusen and Englmann (1931) one case and thirty-nine cases collected from literature; Fuss (1932) one case; Müller (1935) eight cases; Saunders and Montgomery (1934) eighteen cases; Pohl (1939) two cases.

Holthusen pointed out that 23 of the 39 cases of his series, which included cases recorded up to 1931, have been observed before 1910, that is, they had been produced at a time when the carcinogenic hazard connected with the medicinal use of roentgen-rays was not yet fully recognized and appreciated; however, they originated also in a time when this agent was not so generally used. While the estimate made by two competent and authoritative European roentgenologists, Dohan and Kienböck, apparently is not based upon references in the literature, but upon their knowledge of the actual situation existing, one is led to ask: How high does the incidence of therapeutic cancer run