

the hope that by that time probably all of the early cases of professional roentgen-dermatitis had developed into malignancies and that for this reason this type of occupational neoplasia would cease to exist. Unfortunately, Rowntree's expectations were not fulfilled, because in 1927 O'Donovan added a new case to the list of English martyrs of science. Seven years later Handley published an additional case of professional roentgen-cancer, to be followed in the next year by a report of a new case published by Hunter. Bridge and Henry noted in 1928 that there was not a single case of industrial roentgen-cancer on record in England. Wakely added in 1927 to this list one case of pure professional radium-cancer. The total number of occupational roentgen- and radium-cancers in England is thus approximately 20. The first and only case of this occupational disease was reported from Russia in 1932 (Vigdortschik).

The only cases of roentgen- or radium-cancer on an occupational basis recorded from Asia originate from Japan. The first case was reported in 1931 by Yamakawa and Shimada, and was followed four years later by eight additional cases (total of nine cases) published by Miyaji.

South America (Argentina) has contributed so far two cases of this professional neoplasia (Roffo, 1932).

The great majority of the American cases were reported from the United States. Porter and White recorded in 1907 the occurrence of 8 cases of occupational roentgen-cancer. Two years later this number was increased to 25 by Porter. The review of Hesse (1911) referred to 26 American cases of professional origin. Dible and Morison added a new case in 1925. Two years later Cole reported from his own practice 9 cases of roentgen-dermatosis of which two were clinically and a third one histologically malignant. In addition to these therapeutic cases Cole had knowledge of an occupational roentgen-cancer in a physicist, who was not under his care. Mulsow (1931) and Adair (1934) each contributed one case of occupational genesis to the American list.

An appreciable number of occupational roentgen-cancers were added by Saunders and Montgomery (1938), who surveyed a total of 259 cases of chronic roentgen- and radium-dermatosis observed at the Mayo Clinic during 1930 to 1934. There were 26 physicians and dentists in this group, one of whom showed malignant lesions, while of the 233 therapeutic cases of roentgen-dermatitis only 17 had malignant manifestations. It is of medico-legal interest that two of the therapeutic cases developed a roentgen-cancer following the therapeutic application of roentgen-rays because of an occupational dermatitis, establishing thereby a secondary or indirect type of occupational roentgen-cancer. Cole and Driver added one more case of professional roentgen-cancer present in a dentist to the American list. McNeal, Ward and Willis reported the only case of professional radium-cancer of the skin (1923). There are approximately a total of 45 cases of occupational roentgen- or radium-cancer on record from the United States.