

ence of a causative correlation between occupational exposure to benzol and myelogenous leukemia, the authors pointed out that nearly all commercial lubricating oils contain traces of benzol, especially the heavy types of oils. A case of acute aleukemic leukemia following exposure to benzol fumes was recorded by Thompson, Richter and Edsall in 1934. Perrin, Kissel and Pierquin reported recently a case of acute benzol leucosis, while Pessati and Vigliani were able, in 1938, to collect 10 cases of benzol leukemia from the literature (8 in males and 2 in females).

American investigators, studying workers employed in several artificial leather factories, shoe manufacturing plants, and fast-press rotogravure printing plants in the New England States and New York City, added three new cases of benzol leukemia, apart from several cases with leucocytoses and leukemoid reactions. A myeloid leukemia was found in a man, 38 years old, exposed for several years to the inhalation of benzol fumes in a rotogravure printing establishment (Erf and Rhoads). Two cases of myelogenous leukemia, one acute and the second chronic, were observed by Hunter; and Mallory, Gall, and Brickley, following prolonged exposure to benzol fumes in low concentrations. The latter investigators studied a case of acute, aleukemic, lymphoblastic leukemia masquerading under the clinical picture of an aplastic anemia in a boy, who used to play in a painter's shop. Special attention may be called in this connection to an important observation made by Hunter. He found that the first hematological symptoms of a chronic benzol poisoning may become manifest long after exposure to this injurious agent has ceased. Langelez noted from his experience with chronic occupational benzol poisoning in Belgium, that not only cases of atypical aplastic anemia with hypertrophy and myeloid metaplasia of the leukemic type are observed, but also acute and chronic leukemias.

*Etiological Aspects.* Teleky agreed with Falconer, in that a special individual susceptibility and potential leukemic reactivity must be present, if exposure to benzol and subsequent benzol poisoning are to lead to the development of a leukemia. This opinion is shared by Schultz, who conceded that under these conditions the claim of causative interrelations between exposure to benzol and leukemia may be granted. This conception was rejected by Schmidtmann who considered such occupational factors as purely coincidental. Schmidtmann pointed out that the transition of a leucocytosis, resulting from an occupational benzol hazard, into a leukemia has not been observed, and that the so-called "leukemias" produced in animals after experimental exposure to benzol were nothing but irritation hyperleucocytoses. A similar scepticism as to the actual occurrence of benzol leukemias was voiced by Richter, who argued that leukemias usually appear spontaneously. Such reasoning has little weight, because a term like "spontaneous" represents, along with "idiopathic," "essential," or "primary," evidence of our ignorance in etiologic respects.