

EDITORIAL

IS LEUKEMIA INCREASING?

THE article by Sacks and Seeman in this issue poses a question which has been troubling the interested observer for a number of years: Is leukemia increasing? We seem to see more and more cases of this disease all the time. Granted that this may be largely a "clearing house" reaction, why is it that practitioners in small towns and cities are also seeing more such cases? True, the advent of the technician into the community hospital laboratory and the large numbers of routine blood counts consequently being made undoubtedly uncover many a case which was formerly called anemia or purpura. However, the increasing diagnostic acumen of the modern practitioner with his laboratory aids seems hardly great enough to account for the spectacular jump in the leukemia death rate, as graphically illustrated in Sacks and Seeman's article. It is startling to know that each year since 1940, more than 5000 persons in this country have died of leukemia!

If the incidence of leukemia is indeed increasing what can be the reasons? The cause or causes of leukemia not being known, one hardly dares to speculate on this matter. It is known, however, that radiologists have a definitely higher incidence rate of leukemia than other physicians, and that individuals exposed to radioactivity of various types not infrequently develop the disease. It will be of interest to observe the Japanese survivors of the atomic bomb for future indications of proliferative disease of the white cells. Another etiologic possibility is chemical exposure. In all those hematologic cases in which a careful history of exposure to chemicals is taken, one is struck by the frequency of chemical exposure in the cases of leukemia, particularly in the acute and subacute types. The most common chemicals implicated appear to be benzol, benzol ring drugs, and the arsenicals. The photographer working long hours with developers in a poorly ventilated darkroom, the die and dye workers working respectively with benzol and with aniline dyes, gardeners and foresters for years inhaling arsenical sprays have all figured in well-taken histories of leukemia. To be sure, many other similar cases do not present such stories. But in this chemical age, how do we know which chemical is someday going to start off a leukocytic "spree" in a susceptible individual? The widely used sulfonamides and vitamins; the tars and automobile exhaust gas on the roads; the cosmetics, pimple lotions and under-arm lotions so much in vogue are but a few of the numerous chemicals to which civilized human beings have become increasingly exposed. If chemicals should be found to have a bearing in the causation of leukemia, this may well explain the possible increase in incidence of this disease. This possibility merits careful consideration. Statistical studies of exposure to chemicals in leukemic and nonleukemic cases together with well conceived animal experimentation appear to be indicated.

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