

seem advisable to study all the machinists engaged in the same type of manufacturing as the patient whose case has been presented both in the plant in question and in such other plants of like processes as it might be possible to study. The significant clinical and laboratory findings, such as the roentgenological evidence of chest disease and the respiratory observations, could be used, as well as such other pertinent information as that relating to age, sex, race, length of employment in the present occupation and the respiratory signs and symptoms. These data would then be compared statistically with similar types of data obtained on workers engaged in entirely unrelated industries, namely, so-called normal groups. Another important purpose of such a survey is to relate the clinical data to the engineering and analytical findings. Thus, safe environmental conditions can be achieved.

The necessity of a plant survey and the manner in which this may be carried out emphasize to the physician the importance of an actual nonclinical investigation carried out in association with his clinical studies. Such an investigation further impresses on him that he has a role to play in working with the industrial hygiene engineer and chemist to arrive at a satisfactory interpretation of occupational disease and to assist in the improvement of the work environment for the prevention of such disease.

SUMMARY

The occupational origin of this case is suggested by certain pertinent data. About four years prior to the onset of the present illness, this young machinist suffered an acute respiratory disease.³ Two fellow workers became ill at the same time with similar symptoms. All were engaged in machining chemical crucibles of alloy metal.⁴ They all recovered in about eight weeks. In our patient a persistent stubborn dermatitis³ developed about the same time. Later there developed a chronic progressive pulmonary disease with nodular roentgenographic shadows throughout both lungs. There was interference with gaseous exchange across the alveolar capillary barrier.⁵

These facts suggest berylliosis. With this information the plant survey can be better localized; the industrial hygienist is assisted in knowing the sources and kinds of environmental samples he will need, and the chemist is aided in choosing methods of analysis. Their findings should go far in identifying the etiological agent which produced the disease.

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