increasing dyspnea, cough and loss of weight. The company medical records indicated that his weight of 120 lb. (54.5 Kg.) represented a loss of 30 lb. (13.5 Kg.). A chest roentgenogram made on June 15, 1948 showed a fine granular infiltration throughout both lung fields with some increase in the hilar shadows. These changes were considered typical of chronic granulomatosis occurring in beryllium workers. His symptoms increased, his weight fell to 116 lb. (52.5 Kg.), and since there was not any specific treatment it was considered advisable to give him a leave of absence, encouraging him to rest as much as possible. His weight gradually increased to 135 lb. (61 Kg.) and, although he was still coughing considerably, he started light work again on Sept. 26, 1949.

Kidney stones were passed, usually with little discomfort, on six occasions. Twice when they were analyzed spectographically they contained no beryllium.

Over the next year his symptoms reappeared and his weight fell to the lowest it had been at any time (114 lb. [51.5 Kg.]), and it was decided that a trial of ACTH therapy was indicated. He was admitted to the University Hospitals on June 1, 1950.

Physical Examination.—The patient's temperature was 36.8 C. (98.2 F.); pulse rate, 78; respiratory rate, 18; blood pressure, 110/70. The most striking thing was that he appeared so much older than his actual age. There were cyanosis of the lips and the nails and clubbing of the fingers. He was not dyspneic at rest. The heart sounds were normal, and the lungs were clear to ordinary examination. The results of the abdominal examination were normal.

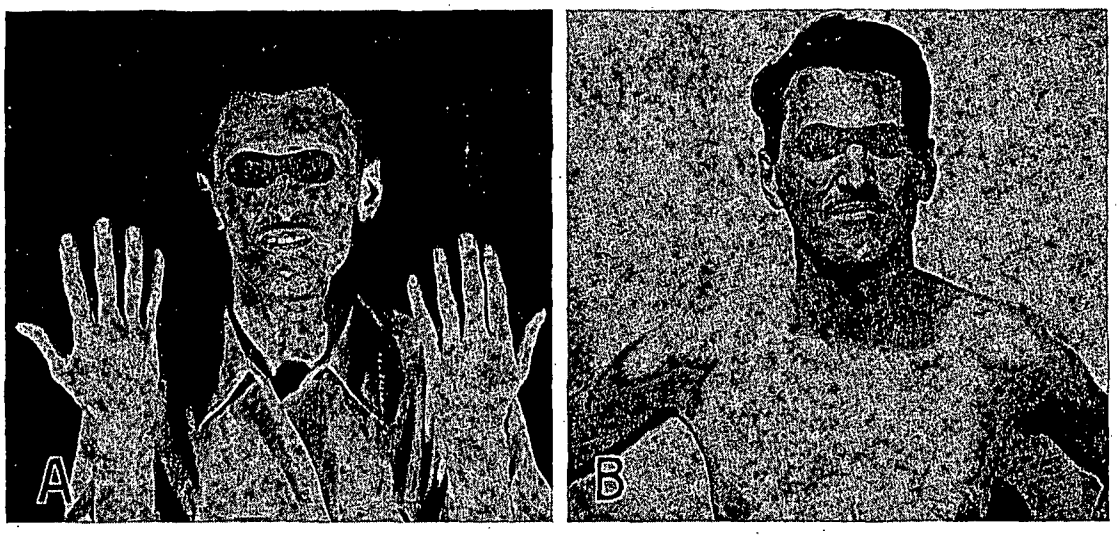


Fig. 1 (case 1).—Patient L. T.: *A,* before treatment. *B,* after 23 days of ACTH therapy.

Pertinent Initial Laboratory Findings.—Most of the findings are shown in table 1. In addition, the admission roentgenogram revealed fine granular shadows throughout both lungs with additional irregular streaks in the upper lobes bilaterally, especially on the right. There was emphysema in both apexes and near the right hilus.

Hospital Course and Progress Report.—After a test dose of ACTH [5] the fasting total eosinophil count dropped from 310 to 86 per cubic millimeter in four hours. On June 7, 1950 ACTH treatment was begun. The treatment schedule was fairly uniform for all cases. Initially (except case 5, L. K.) 100 mg. was given daily, divided into four equal doses. This dosage was usually continued for about one week and then the dose was reduced gradually every five or six days, the patient's appetite and sense of well-being assuring us that the remission was maintained. We found it most effective to continue the four injections daily until the quantity for the 24 hours had been lowered to approximately 20 mg.

On the third day of treatment the patient began to feel improved. His appetite increased, and there was lessening of his cough and dyspnea. His weight began to increase gradually from the 114 lb. (51.5 Kg.) on admission to 136 lb. (61.5 Kg.) on the twenty-first day of treatment

5. The corticotropin used was that prepared by the Armour Laboratories (acthar®).