Steroid Pseudorheumatism

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In five patients who have been on long-term adrenal steroid treatment we have observed a syndrome which superficially mimics rheumatoid arthritis. The symptoms of this syndrome, we believe, are often mistaken for increased activity of rheumatoid arthritis. An evaluation of the symptoms of this syndrome leads to the conclusion that it can be separated into a distinct clinical entity which in some way is the function of prolonged steroid treatment or of rapid withdrawal of steroids following a period of therapy. It is the purpose of this report to present a detailed description of each of five patients having this syndrome whom we have studied. We shall attempt to demonstrate from this clinical study that steroid pseudorheumatism is a clinical entity which mimics rheumatoid arthritis and the treatment of which is the gradual, but persistent, discontinuation of steroid therapy. We interpret these observations as a further warning against the indiscriminate or unnecessary use of steroid hormones which continue to reveal pharmacological actions threatening to the body economy that are still incompletely understood.

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Report of Cases

Case 1.—A 43-year-old white man was admitted to the hospital with the complaints of generalized weakness, muscle cramps and tenderness, joint pain, and unusual mood changes. In December, 1947, the patient experienced his first attack of rheumatoid arthritis. He had migratory polyarthritis and developed deformities of the hands, elbows, knees, and ankles. Manifestations were aggravated by cold, dampness, and hard work. In 1953 the patient was hospitalized at another university hospital for a severe rheumatoid recrudescence involving primarily the knees. He was given a hydrocortisone injection in the left knee, with relief for seven days. At this time 6 gm. of uncoated acetylsalicylic acid per day was prescribed. However, the acetylsalicylic acid irritated his stomach, and he discontinued the medication. Then he was given a course of fever therapy without any improvement. At this time (August, 1953) he was given 100 mg. of cortisone per day and released from the hospital. He took this dosage continuously until admission to this hospital in January, 1956. For an indefinite period prior to admission, the patient noted that he was tired, fatigued easily, had muscle cramps, and had slight joint swelling. There were periods of marked depression, and it had become difficult for him to work. He stated that he had the feeling that he was constantly "losing ground." Six weeks prior to admission the patient ran out of cortisone, and the steroid therapy was abruptly stopped. Shortly thereafter he developed severe pain in the muscles and joints and extreme malaise. He resumed taking 100 mg. of cortisone several days later but could not suppress the muscle and joint symptoms entirely. Therefore, he came to this hospital for treatment.

Past history was significant in that the patient had increasing dyspnea which was the result of a progressive emphysema. Family history was significant in that one sibling has rheumatoid arthritis.

Physical examination revealed deformities in all extremities and moderate obstructive emphysema. Joint examination revealed generalized capsular thickening with small effusions in the right second, third, and fourth metacarpal-phalangeal joints and each ankle joint. There was a moderate flexion contracture of each elbow. The rest of the joints