Transition from Tuberculosis to Sarcoidosis*

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The development of tuberculosis in patients afflicted with sarcoidosis has frequently been noted, but the transition from tuberculosis to sarcoidosis rarely has been reported. The following case report is being presented as an illustration of such a transition.

C. S., a colored man, was 31 years of age when first admitted to the Veterans Administration Hospital, Alexandria, Louisiana, in 1944 as a transfer from the Armed Forces with a diagnosis of tuberculous prostatitis and seminal vesiculitis. This diagnosis was confirmed by cultural methods. At that time, the tuberculin test was positive and the x-ray film of the chest was negative. Sputum studies for acid-fast bacilli by smear were negative as were cultures of the sputum and gastric washings. Between 1944 and 1958 this patient had eight admissions to this hospital. During that interval, tuberculosis recurred in other sites, but the lungs were not involved. Tuberculosis was confirmed in each instance by cultural methods. In 1947, tuberculosis of the spine was found and he became paraplegic. Following drainage of the tuberculous abscess, the paraplegia disappeared and he became ambulant. In 1950, the last spinal fusion was done. In 1951, a draining sinus which communicated with the right fifth costal cartilage was excised. Anti-tuberculosis chemotherapy consisting of streptomycin, paraaminosalicyclic acid and isoniazid, was used between 1950 and August, 1957 when chemotherapy was discontinued on the advice of an internist at the Veterans Administration Regional Office, Houston, Texas. Numerous x-ray films of the chest during these years were negative as were the sputum and gastric cultures for acid-fast bacilli.

He was relatively asymptomatic between August, 1957 and September, 1958 when he reported for a routine check-up at the Veterans Administration Regional Office, Houston, Texas. Following the advice received at the Regional Office, he reported to the Veterans Administration Hospital, Alexandria, Louisiana, in October, 1958 for his ninth admission allegedly to rule out meningitis.

On admission, his only complaint was an occasional headache which had been present for three to four weeks prior to admission. The headaches were described as dull, retrobulbar, and invariably occurred late in the evening following reading or watching television. The headaches were quickly relieved with aspirin and were not associated with nausea, vomiting, or stiffness of the neck nor accompanied by fever, chills, night sweats or anorexia.

Physical examination revealed a well developed and nourished colored man, age 45, who did not appear acutely or chronically ill. Walking was done slowly and in a guarded manner with the aid of a cane. A back brace was being used. The entire back was stiff and motion nil in all directions as a result of spinal fusion. The right testicle was absent due to previous surgery. The neurological examination was normal. Examination of the heart, lungs, abdomen, head, neck and eyes showed no abnormalities. There was no lymphadenopathy.

Laboratory studies revealed the initial white blood count to be 3,250 with a normal differential count. Several additional counts were similar. Hemogram otherwise was normal. Liver and kidney function studies were normal. Total protein 7 grams per cent with albumin 4.4 grams per cent and globulin 2.8 grams per cent. A serum protein analysis by electrophoresis showed 45.3 per cent albumin and 54.8 per cent globulins, the latter distributed as follows: Alpha 1, 5.3 per cent; Alpha 2, 10 per cent; Beta 17.5 per cent; and Gamma 22 per cent. Repeat uric acid values ranged between 5.2 and 5.3 mgm. per cent. Calcium studies normal. Smears of sputum and gastric cultures were negative for acid fast bacilli. Guinea pig negative for tuberculosis after 60 days. Cultures and guinea pig inoculation with material obtained from sternal marrow and scalene lymph node were negative for acid fast bacilli. Sputum cultures and complement fixation tests for fungi were negative. Mantoux skin test positive 15 mm. induration. Bronchoscopy negative. X-ray films of hands and feet were negative of the chest revealed bilateral hilar adenopathy which had not been noted previously. Heart shadow and lung fields were within normal limits. Several additional chest films showed little change although slight decrease in adenopathy may have occurred (See Figures 1, 2 and 3). X-ray films of the spine revealed fusion extending from the seventh thoracic vertebra to the sacrum. Micro-

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FIGURE 1
Representative posterior anterior film of chest taken in 1958 shortly prior to development of hilar adenopathy in 1957. Posterior anterior film of chest revealing hilar adenopathy not previously demonstrated. Subsequent films essentially unchanged.

FIGURE 2
Earlier films not available. Negative chest.

FIGURE 3
Posterior anterior film of chest taken in 1964.
FIGURE 4: Typical sarcoid reaction with giant cell formation and absence of central caseation.

Microscopic examination of a scalene lymph node was compatible with Boeck's sarcoïd. These slides were reviewed independently by three pathologists who made the same interpretation (See Figure 4).

During the six months of hospitalization he was asymptomatic and afebrile. Following initiation of cultural studies, prophylactic therapy consisting of isoniazid and streptomycin was given. Steroid therapy was entertained, but not given on the advice of the area consultant in chest disease who felt that the patient was improving satisfactorily without steroids. He was discharged with instructions to be rechecked at two month intervals. The findings would support the concept that sarcoidosis developed upon an arrested case of tuberculosis.

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