Kartagener’s Syndrome in an American Indian Girl
Report of a Case

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The first report of situs inversus, bronchiectasis and sinusitis was made by Siewert in 1903. This was followed by another report by Oeri in 1909. Kartagener reported four cases in 1933 and another seven in 1935. He was the first to point out that the occurrence of the triad was more than coincidental and that the incidence of bronchiectasis and sinusitis was proportionately more frequent in persons with situs inversus than in other persons, thus suggesting a congenital etiology.

Subsequent studies have shown that the incidence of situs inversus among the general population is 1:8000, and that the occurrence of other congenital abnormalities is significantly greater in this group than in persons without situs inversus. Genetic studies in relation to Kartagener’s syndrome by Adams and Churchill, Lo-

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gan’ and others suggest that the three abnormalities that make up this syndrome are of congenital origin.

We consider this additional case of special interest because of its occurrence in an American Indian.

Case Report

D. E., age 19, is a full-blooded Sioux Indian who has had chronic cough and frequent episodes of wheezing and fever since early childhood. She has nocturnal noisy breathing which is altered by change of position, has had several episodes of slight hemoptysis and also has had frequent nasal stuffiness, headaches and nasal drainage.

Physical examination revealed a well-developed, well-nourished girl who did not appear ill. The nasal turbinates were pale and edematous. The chest was symmetrical with normal respiratory movements. The point of maximal impulse of the heart was in the fourth right inter-space in the midclavicular line. The lungs were clear to percussion. There were diffuse inspiratory and expiratory wheezes. In addition,
there were coarse musical rales, altered by cough, in the right base. On abdominal percussion, there was dullness on the left and tympany on the right. There was no cyanosis, edema, or clubbing of the extremities.

Chest x-ray film (Fig. 1) shows dextrocardia and transposition of the gastric bubble to the right. There are increased peribronchial markings, most marked in the left upper lung field.

Bronchograms performed at age ten and again at age 17 (Fig. 2) show cylindric and sacculary bronchiectasis.

Bronchoscopic examination, performed on several occasions since the patient was six years old, revealed diffuse bronchitis with profuse secretions.

Electrocardiogram is demonstrative of situs inversus.

X-ray film of the sinuses (Fig. 3) shows opacity of the antra.

Tuberculin skin tests were negative to all strengths, including original tuberculin 1:10, until age 12. At age 16, the first strength purified protein derivation tuberculin test was found to be positive. There was no associated change from the former appearance of the chest x-ray film.

The patient is under conservative medical treatment. Although surgery is performed in some cases of Kartagener's syndrome, we consider our patient unsuitable for this form of therapy, in view of her extensive involvement.

REFERENCES


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