SPASTIC BRONCHITIS IN CHILDREN:
ITS RELATION TO ASTHMATIC DIATHESIS*

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Spastic bronchitis is a syndrome in which bronchospasm is superimposed on the signs and symptoms of ordinary bronchitis. It occurs in its most typical form as asthmatic bronchitis. The disease generally begins like ordinary attacks of bronchitis in children with initial symptoms of catarrh and cough, accompanied by rise of temperature which is usually not very high. Bronchial spasm is observed quite early, and in our series of cases, it was noticed by the parents by the time the temperature reached the maximum. The degree of spasm is variable. In some cases it is scarcely evident. In others there may be most pronounced expiratory wheezing with severe dyspnœa. Diffuse sonorous ronchi and moist coarse râles may be heard over both lungs. In some cases the auscultatory signs may be absent. When laboured and hurried respiration with prolonged expiration is present without usual signs of bronchial affection, laryngeal obstruction, namely, with diphtheritic membrane may be suspected. In one such case antitoxin serum was actually injected, and in another tracheotomy was seriously thought of. The illness generally lasts a few days, and in most cases leads to recovery. The râles and ronchi gradually disappear. The cough becomes loose, but persists for a few days more than the fever and the spastic condition. Though this is the usual picture, there are cases where signs and symptoms last for months and such cases may be termed "chronic." Two such cases were seen and will be discussed later.

MATERIAL

During 1940-41 ten cases were seen in Calcutta. All the patients came from fairly well-to-do families, but none of them

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could be said to possess very healthy constitution. They were generally susceptible to cold and one child had allergic diathesis. She suffered from eczema of the face from early infancy.

Age.---Age varied between 2 to 8 years.

Heredity.---There was no history of asthma or other allergic manifestations in the family of any of the cases discussed here. The mother of one child was suffering from insanity for several years and died of what was suspected to be pulmonary tuberculosis. This child had a chronic course of the disease. The mother of another child developed tuberculosis about one year after the child had an attack of spastic bronchitis.

Temperature.---Usually varied between 101° and 103°F and lasted for 3 or 4 days except in two chronic cases. In only one case it rose to 104°F for a little while and quickly came to 103°F and gradually subsided.

Respiratory Tract.---There was always a history of initial nasopharyngitis for a day or two or more before the onset of the febrile symptoms. There was usually congestion of the throat, and the tonsils were somewhat enlarged. Bronchial symptoms were prominent in all the cases. There was no sign of consolidation, and toxæmia was absent in all the cases.

Blood.---Blood was examined in four cases only of which two were chronic. All of them showed leucocytosis, total count varying between 12,000 to 22,000 per c.mm. Eosinophilia was marked.

Chronic cases.---In two cases, (one a boy aged about five years and another a girl aged about seven years), after the usual onset, the symptoms persisted for about six months.

The axillary temperature used to vary between 99°F to 100°F. There was constant dyspnoea, and the rate of respiration varied between 40 and 50 per minute. This continued even during sleep. Both the lungs were filled with râles and ronchi. The patients used to get up from sleep late at night due to paroxysms of cough, which subsided when the accumulated sputum was expectorated.

General condition.---It was rather striking that the patients were quite happy and moved about freely with all the distressing symptoms.