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
dyspnoea. 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 mem-
brane may be suspected. In one such case antitoxoid 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

*From the National Medical Institute and Chittaranjan Hospitals, Calcutta.
Submitted for publication, June 22, 1942.
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 dis-
cussed 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 consoli-
dation, 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 dyspnœa, and the rate of respi-
ration 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 accu-
mulated sputum was expectorated.

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