PAROXYSMAL SNEEZING IN WHOOPING COUGH.

BY

ALAN MONCRIEFF, M.D., M.R.C.P.,
and

R. C. LIGHTWOOD, M.D., D.P.H., M.R.C.P.,

(From the Hospital for Sick Children, Great Ormond Street, London.)

"He sneezed so hard with the whooping-cough" (Polly-wolly-doodle).

In a 'Treatise on the History, Nature and Treatment of Cincough,' by Dr. Robert Watt of Glasgow, published in 1813, it is mentioned that whooping cough may not only begin like a common cold but sometimes continue in this form throughout the course of the disease. Dr. Watt appeared to be well acquainted with this variation in the normal course of pertussis and he quotes Dr. Cullen as saying, 'I have had instances of a disease which, though evidently arising from the Chincough contagion, never put on any other form than that of a common catarrh.' It is somewhat remarkable in view of these observations that the occurrence of paroxysmal sneezing in whooping cough should be so rare and almost unknown to the present generation of children's physicians. The following case was recently under the care of Dr. Robert Hutchison at the Hospital for Sick Children, Great Ormond Street.

Doreen T., aged 3 years and 11 months, began to whoop in January, 1929. She was very sick with the cough, bringing up nearly everything she ate. This condition lasted until the beginning of March, when she ceased whooping and began to sneeze instead. These sneezing attacks occurred about ten times a day, and each attack caused great distress and incontinence of urine. She had suffered from these attacks for three weeks when she was admitted to hospital with an extensive broncho-pneumonia, severe emaciation and a palpable spleen. While under observation she continued to have paroxysms of sneezing, but did not cough or whoop. The paroxysms consisted of a rapid series of 'expiratory sneezes' resulting in the expulsion through the nose of large quantities of tenacious muco-pus. At the end of the paroxysm she drew in her breath and lay back cyanosed and very exhausted. Sometimes she would lean forward during the attack and sometimes she would get on to her hands and knees. Occasionally vomiting of phlegm would occur after the paroxysm, and the sneezing was often brought on by a drink or by examination of the fauces with a spatula. Three weeks after admission the broncho-pneumonia disappeared while paroxysms of sneezing continued three to twelve times a day. At this time a slight whoop was heard at the end of a paroxysm, and she now began to have both whooping and sneezing attacks. At the end of six weeks the whoop had disappeared although occasional mild sneezing attacks continued.

Bacteriological examination of the muco-pus discharged from the nose in one of the paroxysms demonstrated the presence of Gram-negative bacilli of the pertussis type.

There is one other child in the family and he had pertussis after his sister with the ordinary paroxysms of coughing.

The literature on this rare condition is necessarily scanty, although there is a passing reference to it in the writings of Trousseau, Hustin, Henoch, and Kassovitz, and more recently in those of also Griffiths and Mitchell, and J. D. Rolleston. In 1883 H. Roger in his 'Recherches cliniques sur les maladies des enfants,' stated that he had seen several children in whom, in place of a cough, paroxysms of sneezing occurred at regular intervals and large quantities
of muco-pus were poured down the nose. Szegő\textsuperscript{1} appears to have published the first paper on this subject entitled 'Observations on a form of spasmodic sneezing in whooping cough.' He describes a case of pertussis in which paroxysms of sneezing occurred, while a younger child in the same family had the ordinary form of the disease. He gives a very accurate description of the sneezing attacks, and concludes that such attacks strongly suggest that the spasmodic features of pertussis are central in origin. Seitz\textsuperscript{2} mentions the occurrence of sneezing especially in younger children. Dansac\textsuperscript{3} in a paper on the atypical forms of whooping cough gives some attention to the occurrence of sneezing. He points out that the cough in pertussis may be replaced not only by sneezing but also by attacks of hiccough. He quotes various authorities who hold that this form is commoner in young children. Several points of interest arise in connection with this curious phenomenon, but in the limits of this short note further discussion is not possible. The points raised may be conveniently grouped under the following conclusions:—

1. Various equivalents of the whoop in pertussis have been described including paroxysmal sneezing. The occurrence of these equivalents seems to point to a central nervous origin for the spasmodic phenomena of pertussis.

2. Pertussis taking the form of a persistent, unusually severe coryza may not be diagnosed, and such a case may spread the disease.

We are indebted to Dr. Robert Hutchison for permission to publish this case.

REFERENCES.