Esophageal Disorders and Chronic Cough in Children

To the Editor:

We read with great interest the article entitled “The Role of Gastroesophageal Reflux in Chronic Cough and Asthma” by Harding and Richter.1 The authors stress that gastroesophageal reflux (GER) disease causes cough in 40% of patients and that chronic cough may be the sole manifestation of GER disease.

In children, reflux episodes have been associated with unexplained persistent cough and have been reported as the sole cause of chronic cough.2,3 The gold standard for the diagnosis of GER disease is 24-h esophageal pH monitoring, because it is the best available diagnostic test for discriminating between physiological reflux and pathological acid exposure. In the article by Harding and Richter,1 it has been reported that the results of such investigation look not only at esophageal contact time, but also at the correlation between reflux events and symptoms. In children, Orenstein6 has stressed the importance to investigate, in every pH tracing, the temporal relationship between reflux episodes and symptoms. Moreover, irritative esophagus syndrome (IES), characterized by normal esophageal acid exposure and a statistically significant relation between GER episodes and symptoms, has been described in adults as well as in children.4,5

Recently, we have reported a case of a 3-month-old boy with chronic cough, affected by IES.6 We performed 24-h esophageal pH monitoring because all the usual causes of chronic cough were ruled out. The parameters of 24-h esophageal pH monitoring were normal, and GER disease was excluded. However, esophageal pH tracing demonstrated that all cough attacks were preceded by reflux episodes. Fisher’s exact test showed a significant relation between GER episodes and cough attacks. Moreover, to exclude the probability that cough coincided with reflux episodes merely by chance, we used a more complex statistical approach. We calculated the specificity and the sensitivity index: the specificity index was 100% (it is classified as high when the value exceeds 10%). On the basis of these results, IES was diagnosed. Cisapride was administered (0.3 mg/kg tid per os); over the next two days, cough attacks were less frequent and thereafter disappeared. The patient was discharged with continuing pharmacological treatment. He was followed for 2 months during which no cough episodes were reported.

In conclusion, 24-h esophageal pH monitoring is a useful investigation in diagnostic work-up of chronic cough in children, particularly if the most common causes of chronic cough have been excluded. GER disease and IES should be investigated in pediatric patients, even in absence of specific esophageal symptoms.

Correspondence to: Giovanni Corrado, MD, via di Vigna Stelluti 40, 00191, Rome, Italy

REFERENCES