
Readers' Forum

Q. *The paroxysmal cough in pertussis can be extremely distressing. What is the "best" palliative treatment for this symptom apart from specific antimicrobial therapy for pertussis? For how long can this palliative treatment be continued safely?*

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A. The cough in pertussis, especially in children, can indeed be distressing and may result in complications such as subconjunctival and scleral hemorrhages, facial and truncal petechiae, epistaxis, hemorrhages in the central nervous system, umbilical and inguinal hernias and tears in the frenulum linguae. In addition, the paroxysms of coughing often result in vomiting which in turn may result in malnutrition. The conventional teaching is that antibiotics, while they may reduce the infectivity of the patient, do not reduce the severity of cough when they are started in the paroxysmal phase. However, there are data to suggest that erythromycin estolate given in doses of 40-50 mg/kg/day may reduce the severity of cough even when started in the paroxysmal phase. Other preparations of erythromycin or lower doses may not be effective. Several other therapies have been shown to reduce the severity of coughing in pertussis. However, the data on the efficacies of these treatments are limited and conflicting and, therefore, they do not find a place in standard recommendations for the treatment of cough in pertussis. With pertussis becoming uncommon due to immunization, it

is no longer possible to conduct large trials to evaluate the efficacies of these treatments.

The treatments that have been shown to be beneficial include:

- (i) Salbutamol, 0.5 mg/kg per day in 3 divided doses, has been shown to reduce the frequency of cough and of whoop in children with pertussis, as compared to placebo(1).
- (ii) Corticosteroids, betamethasone 0.075 mg/kg/day orally or hydrocortisone succinate 30 mg/kg/day IM, have also been shown to reduce the number, severity and duration of cough paroxysms but because of their potential toxicity, the use of these agents should be limited to patients with life threatening pertussis(2).
- (iii) High-dose specific pertussis immunoglobulin with a high antitoxin concentration has also been shown to reduce the number and duration of whoops in pertussis. However, this preparation is not commercially available(3).

There is no specific recommendation on the duration of treatment with these agents. In the studies quoted above, treatment was given for about 15 days.

Standard cough suppressants and antihistaminics are not effective and their administration could be detrimental by inducing cough paroxysms(4).

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