Dear Editorial Team,

We are very thankful to the reviewers for useful comments provided regarding our paper. According to the referees suggestions and revisions our manuscript has been revised. We passed the manuscript on to a colleague for language editing. All authors suppose that our manuscript has improved and hope that it will be considered suitable for publication.

Best regards,
Irena Narkeviciute

Answers to Dr. Hester E de Melker

1. The aim of our study was to describe the frequency of classical symptoms of laboratory confirmed pertussis and its epidemiology in fully vaccinated children with whole cell B.pertussis vaccine (DTP). Our study showed some epidemiological aspects of immunized cases: time period between the last (fourth) vaccination dose and clinical manifestation of pertussis. We think this information could be useful and interesting for the clinicians.

2. We agree that our study population was not well defined. All patients of our study were hospitalized. Detailed investigation of the children with prolonged cough of unknown etiology was only available in the hospital. We made the corrections. We presented medians in our study. In the Method section we described which groups and why were compared.

Collecting detailed clinical information of the current illness from the patient or from the parents of the patient we found out 11 children who had had two episodes of successive coughing, we mean that they had two waves of coughing (the second started when first one was not ended, cough become more intensified and coughing paroxysm renewed, it means that patients were not able to recover between cough episodes). These patients cough duration was longer than those with one episode (21 children). Literature data suggest that duration of cough increased when more than one agent (B.pertussis) with atypical pathogens, i.e. M.pneumoniae, C.pneumoniae) is detected.

3. Results of our study showed that clinical picture of pertussis in fully immunized children usually were
characterized by prolonged and paroxysmal cough, but rarely by whooping and post-tussive vomiting, and very rarely by apnea. Patients described in our study were hospitalized not for disease severity, but for the possibility to detect the reason of prolonged cough.

4. In the Background we added other possible reasons for the increased incidence of pertussis. According useful reviewers suggestions we made more changes in our paper, especially in the Method and Discussion sections.

5. We are sorry for our main message was not very clearly stated. According to our results fully immunized children had a clinical manifestation of pertussis being at the median 11 years old because of waning vaccine-induced immunity at this age, after 9 years following full schedule (four doses) of vaccination. We discussed the results of our study a little bit more detailed comparing with the findings in the literature. We described more detailed information on household contacts, but unfortunately we do not have more precise information about the age of contact persons (siblings).

7. We agree that part on antibiotic treatment and our sentence on the difference between the duration of cough and antibiotic use were not very clearly written. We made the corrections in the Discussion section.

Answers to Dr. Alberto E. Tozzi

Answers to Minor Essential Revisions

We changed the statement on duration of protection of pertussis immunization in the discussion. We made the corrections in the Discussion.

Thank you very much for your comments, advices and useful suggestions.

Sincerely yours,

Irena Narkeviciute