LETTER TO EDITOR (VIEWER'S CHOICE)

CLINICAL PRESENTATION OF (H1N1)2009 INFLUENZA IN CHILDREN MAY BE DIFFERENT THAN SEASONAL INFLUENZA

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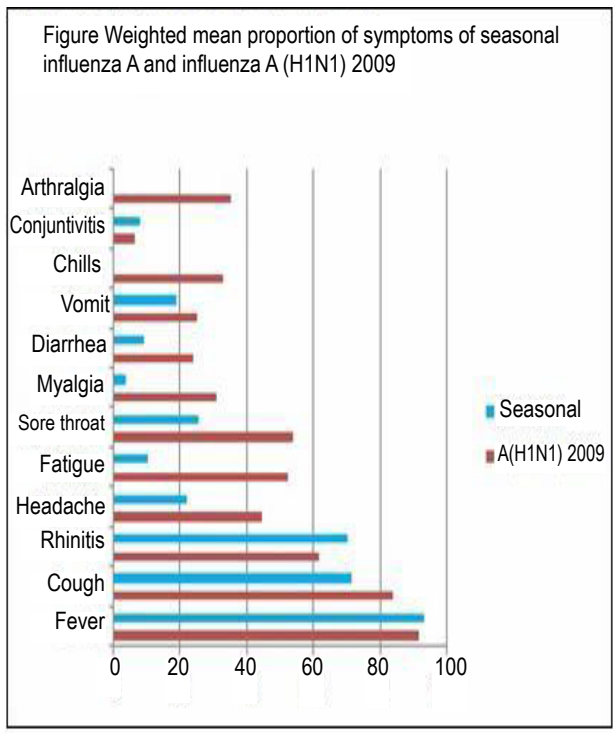
Since the outbreak of (H1N1)2009 novel influenza reported on April 2009, I wondered if the clinical presentation of this infection was similar to seasonal influenza A. The classical clinical picture has been previously described in the association with upper respiratory tract infection in seasonal influenza A or B viruses, but not with pandemic (H1N1)2009 influenza. Some of the symptoms of seasonal influenza are common to all age groups, but the proportion of patients with classic symptoms has had some variations with age. In addition, some of the symptoms are reported in one age group but not in another. The full clinical spectrum of pandemic (H1N1) 2009 influenza has not been clearly determined in children. It's difficult to make the diagnosis of Influenza A pandemic (H1N1) 2009 infection based on clinical grounds alone, which is an important limiting factor. I reviewed six recent publications regarding the clinical presentation of pandemic (H1N1) influenza on children (1-6), but no adult data were included (1-8), then I extracted clinical manifestation data from these reports. The weighted proportion from each symptom was calculated. In the same way I have calculated the weighted mean percentage of two large reports on clinical picture of seasonal influenza A in pediatric patients, summarizing 907 cases (7,8) Due to the considerable heterogeneity of the data no statistic analysis was calculated.

The weighted mean proportion from each symptom on pandemic (H1N1) 2009 was: fever 91.8% (370/403), cough 84.1% (341/405), rhinorrhea or coryza 61.6% (252/409), headache 44.6% (144/323), sore throat 53.8% (176/327), malaise or fatigue 52.3% (157/300), arthralgia 35.3% (69/195) myalgia 30.7% (87/283), chills 32.9% (57/173), vomit 25% (76/304) diarrhea 23.7% (77/325) and conjunctivitis 6.2%(9/144). The intensity and evolution of symptoms were rarely reported. The clinical differences between seasonal influenza A and pandemic influenza A (H1N1) 2009 is presented in figure 1.

Fever, rhinorrhea and conjunctivitis were slightly more prevalent in seasonal influenza, and all other symptoms were more frequently reported in pandemic (H1N1) 2009. The more evident differences were on headache, diarrhea, myalgia and fatigue. Interesting, arthralgia and chills were not reported in seasonal influenza, but were common in pandemic (H1N1) 2009 influenza. Certainly, atypical manifestations of swine flu have been reported elsewhere (4). Some authors suggest that vomiting and diarrhea were more commonly reported in pandemic (H1N1) 2009, but these reports came from adult patients (9). On the other hand, an old report showed that vomit and diarrhea were not uncommon symptoms in children with seasonal influenza (10).

Due to the heterogeneity of the previous reports the interpretation of this result should be taken with caution. Regardless of limitations, this information suggests that the clinical picture of pandemic (H1N1) 2009 influenza infection in pediatric patients is different from common seasonal influenza. I think that pandemic (H1N1) 2009 influenza case definition should be reconsidered particularly for the pediatric population. More data collected prospectively are needed regarding clinical spectrum of pandemic influenza A (H1N1) 2009.

Figure 1. Weighted mean proportion of symptoms of seasonal influenza A and Influenza A (H1N1) 2009.



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