Clinical course of acute infection of the upper respiratory tract in children: cohort study

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Promoting self care for children with acute viral illness is an opportunity for relieving pressure on primary care. Carers may return for a second consultation and expect antibiotic treatment if they are not given a clear idea of what to expect or if their child fails to recover as predicted. We therefore set out to describe the clinical course of suspected acute viral infection of the upper respiratory tract in children who consult their general practitioner. We wanted to help clinicians to better predict the course of the condition.

Participants, methods, and results

We did a secondary analysis of a cohort from a randomised controlled trial. All carers gave written consent, and older children signed a consent form. Fifty five general practitioners in south Wales opportunistically recruited children aged between 6 months and 12 years during routine consultations into a trial of treatment for suspected acute viral infection of the upper respiratory tract. This was an acute illness affecting the upper respiratory tract probably caused, in the clinician’s opinion, by a virus. Clinicians excluded children to whom they prescribed antibiotics at the initial consultation. Clinicians compared intranasal treatment with sodium cromoglicate with intranasal saline in a triple blinded manner. Because children treated with intranasal sodium cromoglicate effectively had the same clinical and statistical outcomes as children treated with intranasal saline, we examined data about the clinical course of the condition for the children as a single cohort.

Of the 290 recruited children, 137 (47%) were boys, the mean age was 5.2 (SD 3.39), and mean duration of illness at the time of consultation was 3.3 (2.18) days. Caregivers completed a daily diary of symptoms for up to 14 days which incorporated the 18 item Canadian dedicated obesity specialists placed at the level of the primary care trust, use of leisure services, and use of the commercial weight loss sector.

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acute respiratory illness and flu scale. This scale scores from 0 to 54, and higher scores indicate sicker children. Four of the items on the scale relate directly to the upper respiratory tract—for example, nasal congestion and sore throat—the remainder assess general symptoms of acute infection—for example, irritability and poor appetite. We considered children who scored 5.5 to have recovered. On the fourth day of the study, 101 (56%) of the children had not recovered. On the seventh day, 49 (26%) had not recovered, and, by the 14th day, 10 (6%) had not recovered (figure). Children who had not recovered by the 14th day had remained unwell; their illness did not follow a clinical course with two phases.

Comment
More than half of children with suspected acute viral infection of the upper respiratory tract are still unwell four days after their initial consultation, a quarter are still unwell after a week (about 10 days after the onset of the illness), and one in 20 is still unwell after two weeks. Despite this, doctors may tell carers that children will get better in a few days. Giving this information to carers may enable them to care for their child more effectively and reduce the need for additional consultations. Being told that a child may have a longer illness could increase requests for treatment, specifically antibiotics, and therefore clinicians must be confident in communicating potential benefits and risks of treatment. Alternatively, carers who know what to expect may not consult when their child’s illness lasts for more than a few days.

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