

Prognosis of Acute Urticaria in Children

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Sir,

Although the literature on urticaria is vast, only few studies are available on acute urticaria (AU), and this is especially true for the prognosis in children (1, 2). The first study of AU in young children was not published until 1990 (3), and a second on hospitalized 1–3-year-olds almost a decade later (4). These studies suggested that between 20% and 30% of young children with AU are at risk of chronic or recurrent urticaria. In contrast, in adults, progression to chronic urticaria is extremely rare (<1%) (5). There is thus a need for further studies of AU in children, particularly in patient groups not selected for severe associated diseases in the context of hospitalization – as was postulated by Prigent (6). The present study was conducted in a rural private paediatric office. Examination of detailed patient records by the same physician allowed for a consistent assessment of symptoms and follow-up over an 8-year period. The following question was posed: What is the risk of progression to chronic urticaria in children with AU?

PATIENTS AND METHODS

The study included children seen from 1 January 1995 to 31 December 2002 in the private office of a paediatrician in southern Germany. Children with the diagnosis of urticaria were identified in the data base of the practice and their medical records were analysed regarding the type of urticaria. Children with physical urticaria were excluded.

AU was defined as daily or nearly daily occurrence of hives and/or angioedema for a duration of up to 6 weeks (7), chronic urticaria as continuous or recurrent occurrence of hives with or without angioedema for >6 weeks (8–10).

For each patient, basic data such as age, sex and date of first presentation at the office were recorded. Duration of urticaria was determined on the basis of the time-span from the first until to the last office visit. Possible persistence of urticaria or occurrence of new episodes of urticaria was checked over a period of up to 8 years.

Data were evaluated for young (<3 years) and older children (3–13 years). χ^2 tests were used to test for differences between age groups (*p* value of 0.05).

RESULTS

Of the 150 children, 56 were <3 years (mean age 20 months) and 94 were >3 years (mean age 6.2 years). While the overall sex distribution of children seen at the office was approximately equal (49.5% boys, 50.5% girls), there were slightly more girls (57%) than boys among the children with AU. Among the younger

children, however, there were 59% boys, compared with 34% in older children (*p*=0.003).

Only 44/150 children sought advice more than twice for AU. The largest time-spans between the first and last presentation were 35 days in young children (mean 6.7) and 64 days (mean 14.2) in older children. No child had to be hospitalized because of urticaria.

Only two (3.5%) of the young children experienced a new attack, 9 and 26 months after the first episode of urticaria, with a duration of 9 and 22 days, respectively. In six older children (5%), a new episode was seen 6–56 months later. One of them had two new episodes.

DISCUSSION

Of the studies made so far of AU in young children, the one we present here covers the largest number of patients. A similarly large number has been investigated by Mortureux et al. (4) who saw 57 children under 3 years, and by Legrain et al. (3) who saw 34 children of <2 years. All other studies included different forms of urticaria and all age groups (11), so that no clear conclusions can be drawn about the differences between groups.

The higher percentage of boys in young children with AD was reported earlier (4). The fact that hospitalization was not necessary in any of the children studied here points to the generally benign nature of the disease, as also stressed by Sorensen et al. (12). This is supported by the low number of repeated office visits, reflecting low parental concern regarding disease severity, as previously observed in a family practice (13). Interestingly, the duration of disease measured as time-spans between office visits was shorter in young children, an observation that has not been reported before.

Different authors report different definitions and percentages of AU developing into a 'chronic', 'recurrent' or 'relapsing' form of disease. Legrain et al. followed their children with AU for 2–7.5 years and reported that 14% experienced 'recurrences' (3). Mortureux et al. followed AU over a period of 1–2 years and concluded that 20–30% of cases evolve into chronic or recurrent disease not suspected before the study (4). In 2003, Léauté-Labrèze stated that about two-thirds of children with AU become symptom-free within 2 months and that one-third of affected children still have symptoms 1 year after the initial attack (1).

According to a recent consensus conference, chronic urticaria occurs in two forms, a) chronic continuous urticaria of >6 weeks' duration occurring daily or on

most days of the week, and b) chronic recurrent urticaria with symptom-free intervals ranging from days to weeks (9). In view of the fact that in children, chronic urticaria has been found to have a median duration of 16.0 months (14), and chronic recurrent urticaria has been reported to be extremely rare (10), none of our children clearly fits into these definitions. Therefore, we looked for alternative terms to describe the events found later than 6 weeks after the first presentation. Kauppinen et al. (15), who observed 40 children for 1–6.5 years, and Sorensen et al. (12) preferred to speak of children who had repeated ‘attacks’ of AU. In line with these authors and with Juhlin (10), who spoke also of ‘attacks’ or repeated ‘episodes’ of urticaria, we used the term ‘new episodes’ for the bouts of urticaria found beyond the endpoint of AU.

Of far more concern than single or repeated episodes of AU is the progression of the disease to chronic urticaria, defined as ‘continuous occurrence of hives with or without angioedema’ (8). Only two of the children in the present study would strictly have to be classified as having progressed to chronic urticaria, because they suffered from hives for 46 and 64 days, respectively. As these durations are very close to the defined endpoint of AU and clearly below the mean duration of chronic urticaria of 16 months, it would, in our opinion, be more appropriate to group these children with AU, particularly in view of the good clinical prognosis.

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