

Homeopathic Treatment of Children with Atopic Eczema: A Prospective Observational Study with Two Years Follow-up

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Sir,

Homeopathy is practised in many regions of the world (1), especially in high-income countries where it ranks the most popular among traditional, complementary, or alternative medicines (1–3). One out of 5 children in a German homeopathic physicians' practice suffered from atopic eczema (AE) (4). Meta-analyses of placebo-controlled studies including only diagnoses other than AE have shown inconsistent results (5, 6). The only randomized placebo-controlled study on AE (7) was stopped due to recruitment problems and drop-outs. In a prospective observational study we investigated the treatment and possible effects in 3981 consecutive patients (1130 children and 2851 adults) who consulted a physician for classical homeopathic therapy. This paper presents the subgroup of children with AE (ICD-9: 691.8, ICD-10: L20.8), followed up for 24 months. For more details and methods see (8).

RESULTS

We included 225 children (Table I) in this intention-to-treat analysis with a disease duration of AE of 3.6 ± 3.8 years. On average the last homeopathic medication was documented after 11.8 ± 10.1 months; however, the majority of patients (69%) continued homeopathic care at the end of the study. Over the course of the study patients received 7.3 ± 6.4 homeopathic prescriptions, most frequently *Calcium carbonicum* (8.2%), *Tuberculinum* (7.2%), and *Medorrhinum* (6.8%). In total, 137 different homeopathic remedies were used. The strongest improvement in diagnoses and medical complaints was seen in the first 3 months, and it continued during the full observation period (Table II). Physicians' severity assessments tended to be more positive than patients' assessments, still all changes since baseline were of large effect size (Cohen's d 1.76–2.56). After 24 months, the AE as well as the other baseline diagnoses were considerably relieved, while reductions in use of conventional medicines were observed (Table I).

DISCUSSION

The patients with AE in our study suffered from long-term disease. The severity of disease and quality of life improved substantially and the uses of conventional medication and health services decreased markedly. The methodological strengths of our study include consecutive patient enrolment, high follow-up rates, and the

Table I. Sociodemographic data, co-morbidity (incl. ICD-10 codes) and additional conventional medication ($n = 225$)

Female, % (n)	51.6 (116)
Age (years, mean \pm SD)	5.0 ± 3.9
Parents expectation: homeopathy, % (n) ^a	
Will help	74.2 (167)
Will maybe help	24.9 (56)
Will not help	0.4 (1)
Concomitant diagnoses at baseline*	
Average number (mean \pm SD)	2.1 ± 1.0
Average severity (NRS, mean \pm SD)	5.2 ± 1.6
Frequent infections R68.8, % (n)	11.1 (25)
Allergy T78.4, % (n)	8.0 (18)
Asthma bronchiale J45.9, % (n)	8.0 (18)
Chronic bronchitis J42, % (n)	5.8 (13)
Patients using conventional medication, % (n)	
Baseline	
ATC-Code D (Dermatologicals)	9.8 (22)
ATC-Code R (Respiratory system)	30.7 (69)
Corticosteroids	4.4 (10)
0–3 months	
ATC-Code D (Dermatologicals)	2.7 (6)
ATC-Code R (Respiratory system)	13.8 (31)
Corticosteroids	0.9 (2)
>3–12 months	
ATC-Code D (Dermatologicals)	1.3 (3)
ATC-Code R (Respiratory system)	16.4 (37)
Corticosteroids	0.4 (1)
>12–24 months	
ATC-Code D (Dermatologicals)	0.4 (1)
ATC-Code R (Respiratory system)	13.8 (31)
Corticosteroids	0 (0)

*Only those diagnoses seen in $\geq 5\%$ patients; with ICD-10 code.

^aMissing data from one case.

NRS: numerical rating scale; 10: maximum; 0: cured; ATC: anatomical therapeutic chemical classification system; SD: standard deviation.

participation of about 1% of all certified homeopathic physicians in Germany. In contrast to randomized trials, our study describes patients from everyday practice with multiple morbidities and a wide range of lifestyles. This ensures a high degree of external validity that allows extrapolation to usual medical care. Our study was designed to evaluate homeopathic treatment in patients with various diagnoses that disallowed the use of disease-specific measurement instruments. The effect size of the severity ratings after 12 and 24 months was large. This may be explained mainly by unspecific effects, natural course of disease or regression to the mean, which our study was not designed to control (effect sizes in between-group comparisons are usually smaller). Our study does not support conclusions as to the effectiveness of the homeopathic remedies, because no methodology for this

Table II. Severity of diagnoses symptoms and change over time. At baseline, 3, 12 and 24 months patients and their physicians rated the severity (patients: complaints, physicians: diagnoses) on a numeric rating scale (NRS, 0: no complaints; 10: maximum severity)

	Atopic eczema	All diagnoses	All complaints
NRS, mean (95% CI)*			
Baseline	4.68 (4.44; 4.91)	5.20 (4.99; 5.41)	5.68 (5.42; 5.94)
Month 3	2.97 (2.73; 3.21)	2.98 (2.77; 3.19)	3.16 (2.88; 3.44)
Month 12	1.73 (1.49; 1.96)	1.87 (1.66; 2.08)	2.98 (2.68; 3.29)
Month 24	1.06 (0.82; 1.30)	1.21 (1.00; 1.42)	2.52 (2.19; 2.84)
Change on NRS, mean (95% CI)*			
Months 0–3	-1.70 (-1.92; -1.49)	-2.22 (-2.41; -2.02)	-2.52 (-2.86; -2.17)
Months 0–12	-2.95 (-3.22; -2.68)	-3.33 (-3.57; -3.09)	-3.10 (-3.42; -2.77)
Months 0–24	-3.61 (-3.91; -3.31)	-3.98 (-4.25; -3.72)	-3.52 (-3.87; -3.18)
Effect size, mean (95% CI)#			
Months 0–3	0.83 (0.94; 0.73)	1.43 (1.55; 1.30)	1.47 (1.67; 1.27)
Months 0–12	1.44 (1.57; 1.31)	2.14 (2.30; 1.99)	1.81 (2.00; 1.62)
Months 0–24	1.76 (1.91; 1.62)	2.56 (2.74; 2.39)	2.06 (2.26; 1.86)
Responder rates at end of study (% (n) of patients)			
Fully cured	30.2 (68)	37.3 (161)	
Better by ≥50% baseline	24.0 (54)	25.7 (111)	
Better by ≥10% <50%	3.1 (7)	3.7 (16)	
Change within ±10%	1.3 (3)	1.9 (8)	
Worse >10%	0.4 (1)	0.7 (3)	

CI = confidence interval.

*Statistical analysis: intention-to-treat analysis (using SAS/STAT[®] v8.2 software), missing values handled as follows: cured complaints: severity = 0 in subsequent records; deceased patients: severity = 10. Remaining missing values were multiply imputed according to Rubin (11). For each imputed data set, treatment effects were estimated on the basis of a generalized multiple linear regression model according to Diggle et al. (12). #Cohen's d classified: as >0.8, large; >0.5, medium >0.2, small. All changes $p < 0.001$.

purpose (control group, randomization, blinding) was built into its design and patients could use additional conventional therapies. The aim of this study was to provide systematic and detailed information about status and effects of homeopathic medical care in usual care. These data could also be helpful in the planning of further research projects on homeopathy, which could include specific instruments, such as SCORAD (SCORing Atopic Dermatitis) (9, 10) and control groups. The reduction in conventional medication also may not be due to the homeopathic remedies alone. Homeopathic physicians are known to use conventional means with a certain hesitation, thus functioning as a kind of "gatekeeper".

The authors declare no conflict of interest.

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