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Headache in epilepsy patients: The (un)awareness of this phenomenon among Dutch neurologists



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ABSTRACT

Purpose: Headache is a frequently heard complaint that can strongly influence quality of life. This is probably even more so in people with a chronic illness. Knowing that headache, and especially migraine, is more frequent among epilepsy patients, the knowledge concerning this problem has been studied among Dutch neurologists.

Methods: Seven hundred and seventy two neurologists, working in 89 hospitals and two tertiary epilepsy clinics were asked to participate. Using a questionnaire, neurologists were surveyed on different subjects, e.g. whether they thought current headaches are more frequent in people with epilepsy than in the general population, their interest for epilepsy and how many patients with epilepsy visited their polyclinic per month.

Results: In total, 334 questionnaires were returned (response rate of 43%) of which 18 were excluded. One third of neurologists responded affirmatively that current headaches are more prevalent among people with epilepsy and eight percent knows that this is, more specified, migraine. The number of years of experience does not influence knowledge on headaches in epilepsy patients. The interest in epilepsy and the number of epilepsy patients per month on the polyclinic does.

Conclusions: These results show that the occurrence of headache in people with epilepsy is underestimated by Dutch neurologists. This leaves an often bothersome and potentially treatable condition underexposed.

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1. Introduction

Headache is one of the most frequent complaints heard by a general practitioner or a neurologist. It is a problem that is experienced by 80% of the general population anywhere during their life and when calculated globally, numbers are found of 47% of the general population suffering from current headaches, 10% of current migraine and 38% of current tension type headache [1,2]. In fact, migraine and tension type headaches are a major burden on both the health system and health cost [1,3]. As far back as in 1898, an editorial in the Journal of American Medical Association noted that there was a need to find “a plausible explanation of the long recognised affinities of migraine and epilepsy” [4]. Also, more

recent studies have shown that current headaches (especially migraine) occur more often in people with epilepsy, which has also been confirmed in a recent study performed in our tertiary clinic (unpublished results) [5–7]. Moreover, it is important to realise that headache can also be a solely ictal phenomenon, which, if not properly recognised, can be misdiagnosed and mistreated for long periods of time [8–11]. Also, if headaches are experienced besides a chronic illness, many patients are inclined not to mention this problem, as this is not regarded the main issue [11]. Therefore, an often bothersome and potentially treatable condition might remain underexposed, if not questioned by the treating neurologist. To survey this issue, a study amongst Dutch neurologists was set up.

2. Methods

In an elaborate Internet search all the names of neurologists working in a total of 89 Dutch hospitals and two tertiary epilepsy clinics were collected. These names were verified by calling the Neurology secretaries of all clinics. In May 2013, an informative

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Is current headache more prevalent in people with epilepsy than in people without epilepsy?

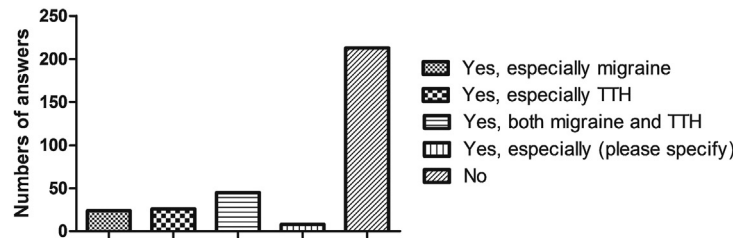


Fig. 1. Answers to the question: is current headache more prevalent in people with epilepsy than in people without epilepsy? TTH tension type headache.

letter and questionnaire were sent to a total of 772 neurologists. Using a questionnaire, neurologists were surveyed on different subjects. For example, their interest for epilepsy (“Would you consider yourself an neurologist without special interest for epilepsy, with special interest for epilepsy or an epileptologist?”), the age of their population (“Are you a paediatric neurologist/treating patients of all ages/treating almost only adult patients?”) and how many patients with epilepsy visit their polyclinic per month. Furthermore, neurologists were questioned about whether they thought current headaches are more frequent in people with epilepsy than in the general population and whether the neurologist asked both control and new patients with (suspected) epilepsy about headache complaints. Finally, they were asked whether epilepsy patients mention headache complaints spontaneously.

Incomplete questionnaires were excluded. Subsequently, answers of different groups of neurologists (e.g. neurologist without special interest in epilepsy versus epileptologist and paediatric neurologist versus neurologist treating adults) were compared. Statistical analysis was performed using the χ^2 -test and Fisher's exact test. SPSS v.17.0 was used for analysis.

3. Results

A total of 334 neurologists returned the questionnaires (i.e. a response rate of 43%). Of those 18 were excluded, because they

were incomplete. One third of neurologists (32.6%) answered affirmatively that current headaches are more frequent amongst epilepsy patients. Eight percent correctly indicated that, when divided into subtypes, migraine occurs significantly more often than in the general population (see Fig. 1). More than half of the neurologists (58%) make inquiries on a regular to standard basis about headaches when taking history from a new epilepsy patient and 18% does this with return visits. Neurologists indicate that 74% of their patients bring up the subject from time to time and 10% on a regular basis.

For results of subgroups of neurologists, see Tables 1 and 2.

4. Discussion

Regarding the fact that almost three quarters of people with epilepsy suffer from current headaches (which, as mentioned, can also be a solely ictal phenomenon [8–11]) and the fact that this is recognised by merely one third of neurologists, our results clearly show that this matter is under recognised by Dutch neurologists. Knowledge of the fact that current headaches occur more often within the population of epilepsy patients improves when neurologists are interested in epilepsy or regularly see patients with epilepsy. The years of experience of the neurologist do not influence the knowledge. Merely eight percent of Dutch neurologists answered affirmatively that current migraine is more

Table 1
Knowledge on the higher prevalence of current headaches in epilepsy patients.

Is current headache more frequent in people with epilepsy than in people without epilepsy?	Yes n (%)	No n (%)	P-values
Neurologist			<0.001
No special interest in epilepsy	54 (25)	161 (75)	
Special interest in epilepsy	26 (36)	46 (64)	
Epileptologist	23 (79)	6 (21)	
Neurologist			0.001
Paediatric neurologist	13 (52)	12 (48)	
Neurologist, area of interest paediatrics	8 (44)	10 (56)	
Mixed population regarding to age (Vast) majority adult patients	24 (49)	25 (51)	
	58 (26)	166 (74)	
Years of experience			n.s.
0–5	29 (30)	67 (70)	
5–15	41 (40)	62 (60)	
>15	33 (28)	84 (72)	
Number of epilepsy patients on polyclinic per month			<0.001
<5	13 (20)	52 (80)	
5–20	54 (29)	134 (71)	
>20	36 (57)	27 (43)	

n.s., not significant.

Table 2
Knowledge on the higher prevalence of current migraine in epilepsy patients.

Is migraine more prevalent in people with epilepsy than in people without epilepsy?	Yes n (%)	No n (%)	P-values
Neurologist			n.s.
No special interest in epilepsy	16 (7)	199 (93)	
Special interest in epilepsy	9 (13)	63 (88)	
Epileptologist	1 (3)	28 (97)	
Neurologist			0.027
Paediatric neurologist	5 (20)	20 (80)	
Neurologist, area of interest paediatrics	3 (17)	15 (83)	
Mixed population regarding to age (Vast) majority adult patients	5 (10)	44 (90)	
	13 (6)	211 (94)	
Years of experience			n.s.
0–5	3 (3)	93 (97)	
5–15	13 (13)	90 (87)	
>15	10 (9)	107 (92)	
Number of epilepsy patients on polyclinic per month			n.s.
<5	4 (6)	61 (94)	
5–20	15 (8)	173 (92)	
>20	7 (11)	56 (89)	

n.s., not significant.

prevalent among people with epilepsy when compared to the general population. To our knowledge, this is the first study looking into the awareness of neurologists on the phenomenon of higher prevalence of current headaches and migraine in epilepsy patients. An important strength of our study is that we have a response rate of nearly half (43%) of all Dutch neurologists working in a hospital or tertiary epilepsy centre. A limitation is that there might be bias in that neurologists who believe that headache is a frequent complaint of epilepsy people are more eager to respond. However, this would only mean that in fact, the percentage of neurologists answering the question of the co-occurrence of headache and epilepsy correctly would be lower. Apart from that, we have only interviewed neurologists in the Netherlands, not knowing whether the underestimation of current headache in patients with epilepsy is a Dutch phenomenon or in fact a more widely accepted misapprehension. Furthermore, geographical differences within the Netherlands were not studied. It would be interesting to expand this study in order to research geographical distribution of this problem in different areas of our country and also to expand the study abroad, to assess whether the underestimation of current headache in people with epilepsy is a phenomenon that might be due to a flaw in our neurological training.

We propose to incorporate this knowledge properly into the training of (future) neurologists. Another aspect would be to encourage patients to mention their complaints when visiting their neurologist.

5. Conclusion

In conclusion, the results of our study show that unfortunately the occurrence of headache in people with epilepsy is underestimated by Dutch neurologists. This leaves an often bothersome and potentially treatable condition underexposed.

Conflict of interest statement

None of the authors have any conflict of interest to disclose.

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