

Headache in a population of hospital workers

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Abstract Headache prevalence is very high, especially during working life. Hospital workers are expected to be particularly careful with health problems. Few data are available about the dimension of the headache-related problems among hospital workers, including disease awareness and diagnostic delay. 502 subjects employed in our hospital (doctors, nurses, technicians, administrative employees) were enrolled over a 3-month period and submitted to a questionnaire about the presence of headache, its characteristics and time spent from disease onset to diagnosis. We used the ID-migraine test, a validated tool, to obtain a correct migraine diagnosis based on a three-question test. Age and education were collected as continuous variables while the other variables (sex, presence of headache, presence of migraine, diagnosis put by the general practitioners) were encoded as binary. The difference of the distribution of the analyzed variables in tables was evaluated with χ^2 test. The data were analyzed with SPSS 13.0 for Windows systems. In the analyzed population (mean age 40.15 ± 11.0 years; males 60.7 %), 216 patients complained of headache (43.1 %) and 77 (15.4 %) were diagnosed as migraineous at the in-hospital evaluation. Among the 216 cephalalgic patients, the majority (59.7 %, $p < 0.0001$ at χ^2 test) did not refer to their general practitioner. Of the 77 patients affected by migraine, 55.8 % referred to their general practitioner, but only 27 (35.1 %) received a definite migraine diagnosis. Fifty subjects (64.9 %)

were still undiagnosed and unevaluated at the moment of our survey ($p < 0.0001$ at χ^2 test). Headache prevalence was very high in this population of hospital workers. Diagnostic errors and delays were frequent. Unexpectedly, self-awareness of the headache was very low. Headache, particularly migraine, is a relevant cause of loss of working days and low productivity. Our findings suggest the necessity to program initiatives aimed to raise the awareness of headache in order to improve diagnostic and therapeutic possibilities.

Keywords Migraine · Headache · Hospital workers · Self-awareness

Introduction

Headache is a high prevalent condition, especially during working lifetime. Several studies have shown that in Europe headache is among the most frequent cause of reduced productivity and absenteeism [1], with a mean annual cost of €1222 per person. Preliminary reports suggested that very often patients lack self-awareness of their headache, and they do not refer to their general practitioner or to a neurologist.

Hospital workers, even with different qualifications, are expected to be particularly careful with health problems. Few data are available about the dimension of headache-related problems in a hospital workers population including disease awareness and diagnostic delay.

Methods

We consecutively enrolled subjects of both sexes employed in our hospital (University Hospital of Ancona) with different qualifications: doctors, nurses, technicians, administrative

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employees and sanitary operators. We submitted them to a written questionnaire regarding the presence of headache and its characteristics; further, we investigated if subjects went to their general practitioners for their symptoms and the time spent from disease onset to diagnosis. We adopted the ID-migraine test, a validated tool to formulate a migraine diagnosis in primary care setting based on a three-question test [2]. Age and education were collected as continuous variables while the other variables (sex, presence of headache, presence of migraine, diagnosis put by the general practitioners) were encoded as binary. The difference of the distribution of the analyzed variables in tables was evaluated with χ^2 test. The data were analyzed with SPSS 13.0 for Windows systems.

Results

During a 3-month period, we enrolled 502 subjects employed in our hospital who filled in the questionnaire. The analyzed population presented a mean age of 40.15 ± 11.0 years; males represented 60.7 % of the population. Of the analyzed sample, 216 subjects presented a history of headache (43.1 %). According to ID-migraine test, 77 workers (15.4 %) were diagnosed as migraineous at the in-hospital evaluation. Among the 216 cephalalgic patients, only 87 (40.3 %) referred to their general practitioner, while the majority (129 patients, 59.7 % of the sample) did not refer to their doctor ($p < 0.0001$ at χ^2 test). Of the 77 patients affected by migraine without aura, only 43 (55.8 %) referred to their general practitioner. Only 27 (35.1 %) had a definite migraine diagnosis, while 50 (64.9 %) subjects were still undiagnosed and unevaluated at the moment of our survey ($p < 0.0001$ at χ^2 test).

Discussion

Our data show that the prevalence of headache in a population of hospital workers is high. This fact reflects the normal epidemiology of migraine, that is especially present among 20–40-year-old people. However, few people referred to their doctor for headache, and this is an unexpected finding. A large Italian study showed that 62.4 % of migraine patients visited their general practitioner in the last year and only the 38.2 % were evaluated by a specialist for headache [3]. Several different studies of our group showed that migraine patients often spend many years to

obtain a correct diagnosis, performing several useless instrumental examinations and specialistic visits [4, 5]. In the present study, only the 40.3 % of the patient referred to their general practitioner. This finding suggests that hospital workers are not more sensitized regarding the headache problematic than general population. Also, only few patients received a correct diagnosis by their general practitioner. This element confirmed our previous data about the difficulties to apply IHS diagnostic criteria for migraine [6]. IHS criteria are theoretically simple and easy to apply in a clinical contest, without the need for hospitalization or instrumental exams, yet many general practitioner did not use them and it seems that they tend to confound migraine with other pathologies as sinusitis or cervical arthrosis.

Our findings show that hospital workers generally have a low self-awareness about headache presence and tend to avoid evaluation by their general practitioner. On the other hand, when they referred to the general practitioner, a correct diagnosis was put only in a minority of cases. Our data suggest the opportunity, and the usefulness to promote events to raise the awareness on cephalalgic disorders in order to improve diagnostic and therapeutic pathways.

Conflict of interest The authors certify that there is no actual or potential conflict of interest in relation to this article.

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