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Practice guidelines

# French Guidelines For the Emergency Management of Headaches

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INFO ARTICLE

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## 1. Preamble

### 1.1. *Requesting body*

These guidelines were elaborated at the request of the French society for the study of migraine and headache disorders (SFEMC[1]) and the French Society of Neurology (SFN[2]).

### 1.2. *Topic*

These guidelines concern recommended management practices for patients with headache disorders seen in an emergency setting. Four clinical aspects are distinguished: key elements of history taking and the physical examination, diagnostic and therapeutic strategies.

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[1] SFEMC *Société Française* d'Etude des Migraines et des Céphalées.
[2] SFN *Société Française* de Neurologie.

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These guidelines do not concern the management of patients with headache disorders seen outside the emergency setting. Specific recommendations are available for migraine, chronic daily headache, or cluster headache.

### 1.3. *Patients concerned*

These guidelines concern adult patients.

### 1.4. *Professionals concerned*

These guidelines are written for healthcare professionals involved in the management of patients with headache disorders seen in the emergency setting.

### 1.5. *Guideline grade and methodology*

These guidelines propose grade A, B or C recommendations according to the following modalities:

- Grade A recommendations are based on scientific evidence with a high level of proof, e.g. high-power randomized comparative trials without major bias and/or meta-analyses of randomized comparative trials, decision analysis based on well-conducted studies;
- Grade B recommendations are based on scientific conjecture issuing from intermediary level-of-proof studies, e.g. intermediate-power randomized comparative trials, well-conducted non-randomized comparative trials, cohort studies;
- Grade C recommendations are based on studies with a low level-of-proof studies, e.g. case-control studies, series of cases

Unless specified, the proposed guidelines are based on professional agreement among the members of the working group.

The lack of a level of proof does not imply that the proposed guidelines are not pertinent and useful. The lack of proof should incite the development of complementary studies when possible.

These guidelines were elaborated by the SFEMC and the SFN, in application of the methodology for the elaboration of good clinical practices (GCP). The pilot group was composed of six members: Anne Donnet (neurologist), Anne Revol (neurologist), Pierric Giraud (Neurologist), Dominique Valade (emergency headache specialist), Pierre Michelet (intensivist), Philippe Cornet (general practitioner). The working group was composed of nine members: Xavier Moisset (neurologist), Jérôme Mawet (neurologist), Evelyne Guegan-Massardier (neurologist), Eric Bozzolo (neurologist), Vianney Gilard (neurosurgeon), Eléonore Tollard (neuroradiologist), Thierry Feraud (intensivist), Bénédicte Noëlle (neurologist) and Claire Rondet (general practitioner). It was headed by Anne Donnet. Xavier Moisset wrote the guidelines.

A reading group composed of members of the SFEMC and the SFN as well as independent healthcare professionals from these societies (general practitioners, intensivists, neuroradiologists) was consulted.

## 2. Introduction

Headache during the last three months is observed in approximately 15% of the general population [1]. Consequently, about 1% of patients seeking ambulatory care do so for headache [2], and 2% of patients attending an emergency room do so for headache [3,4]. Despite the fact that 95% of these patients return home with a diagnosis of benign primary headache, the attending physician must be able to detect secondary and potentially dangerous headache that requires referral [3,4].

Headache disorders are defined according to the criteria proposed in the 3rd version of the International Classification of Headache Disorders [5].

The present guidelines concern all types of headache disorders, whether primary or secondary, occurring as an isolated symptom leading an adult patient to seek emergency medical care (call to primary care physician, emergency squad or emergency room). There are different reasons for which patients seek emergency care for headache disorders:

- sudden-onset headache;
- first-occurrence headache or unusual headache not corresponding to prior experience;
- headache unresponsive to usual treatment;
- chronic headache no longer tolerated.

As a preamble, we recall that headache intensity and severity are not correlated. In the majority of cases–even for patients seen in an emergency setting–headache is a primary disorder. Primary headache can be highly disabling but does not in itself constitute a functional or vital risk. What is important is to identify secondary headache in order to institute adapted–sometimes emergency–treatment.

**Until evidence to the contrary, sudden-onset and/or unusual headaches should be considered as secondary disorders warranting emergency complementary exploration.**

Headache that the patient recognizes as usual, but with greater intensity and unresponsive to usual pain relievers, is generally a primary headache refractory to habitual treatment. In this situation, complementary exploration is not useful and–under the condition that the physical examination, notably the neurological examination, is normal–management should focus on achieving pain relief.

## 3. How can the four clinical presentations–recent onset-headache, recent progressive headache, recurrent paroxysmal headache, and chronic daily headache–be distinguished?

In daily practice, patients seek emergency care for four main types of headache disorders (Fig. 1):