# **Headache Medicine**

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## **Short Communication**

# Mnemonic method in Portuguese for headaches in emergency room

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#### **Abstract**

#### **Background**

It is of crucial importance to quickly stratify the risk of patients with headaches in the emergency setting, and mnemonics can be used to remember the alarm criteria in those cases. Such mnemonics were written in English and Spanish, but none in Portuguese.

#### **Objective**

To present the first mnemonic method in Portuguese for alarm criteria in emergency headaches in order to facilitate their identification and diagnosis.

#### Methods

A search was made through different databases for a mnemonic method regarding alarm criteria in emergency headaches that was written in Portuguese. None were found. Thus, the emergency criteria were gathered and turned into a mnemonic in Portuguese.

#### **Results**

We present the mnemonic method "RISADA PEGA".

#### Conclusion

We believe this tool can be very useful in teaching and clinical settings.

Keywords: Headache Emergencies Method

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## Introduction

The assistance provided at the Emergency Department is underlined by unplanned attendance that poses challenges to health professionals. The access to patients' medical history, the wide spectrum of diagnosis and the numerous patients who require immediate attention are issues physicians face in this scenario. In this fast-paced environment, having a strong memory is valuable, since decisions are to be taken fast and precisely. Mnemonics assist the brain to store information safely. They were used by Greek students to recall information and may prove to be useful in the hectic emergency rooms.

In clinical practice its use is widely disseminated, as it improves retention of clinical concepts and enriches the generation of differential diagnoses. In the neurology specialty, mnemonics have assisted in the recognition of alarm criteria for headaches in the emergency setting.

Neurological emergencies are characterized by a sudden onset, poor prognosis, and possible need for immediate resuscitation.<sup>1</sup> In the emergency department, acute headaches are presented by 2%-4% of admitted patients<sup>2-4</sup>, and secondary headaches are associated with high morbidity and mortality.<sup>5,6</sup>

In this context, mnemonics were created for alarm criteria in emergency headaches: in English there is the "SNOOP4", and in Spanish there are the "NI ESPPERE" and "PPIENSENLo".

After searching different databases, we were not able to find a mnemonic method for these criteria that was written in Portuguese.

## The Mnemonic Method

With that in mind, the method "RISADA PEGA" ("laughter spreads", in English) was created. It stands for:

- R Repentina / (Sudden onset)
- I Início depois dos 50 anos / (onset in a patient older than 50)
- **S** Sinais e/ou sintomas de doenças sistêmicas ou neurológicas / (Signs and/or symptoms of systemic or neurologic diseases)
- A Anormalidades no exame neurológico / (abnormalities upon neurologic examination)
- **D** Depressão da imunidade (AIDS, Câncer) / Depressed immunity (HIV or cancer)
- A Antecedentes: doenças que podem acometer o SNC;

número de vindas ao PS, história familiar de cefaleia) / (prior conditions: diseases affecting the central nervous system; number of visits to the health center, history of headache in the family)

- **P** Padrão alterado (mudança no padrão anterior da cefaleia) / (change in headache pattern)
- **E** Esforço / (exertion; effort, headaches with Valsalva's maneuver or headache associated with sexual activity)
- **G** Gravidez / (pregnancy)
- A Autonomia (sinais autonômicos) / (autonomic signs)

## Conclusion

Secondary headaches are challenging complaints in the emergency setting, and they require a meticulous investigation of the patient's history and physical examination so that the patient's risk is properly evaluated. 1,5 Time is an important factor, since there are time constraints for diagnosis and initial treatment in the emergency department. 1 This shows the usefulness of a method to quickly identify the alarm criteria and, through that, correctly stratify the patient's risk and initiate treatment.

As far as we know, this is the first mnemonics in Portuguese for the alarm criteria in emergency headaches. We believe this is a useful tool for Portuguese speaking medical students and clinical practitioners. Furthermore, it may be a way to educate patients and their families.

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