

## Emergency treatment of migraine at Rio de Janeiro. Are the patients getting the right thing?

Abouch Valenty Krymchantowski R. Siqueira Campos, Brazil

**Background:** Emergency treatment of migraine attacks may vary with geographical location and resources. In developing countries, the drugs used may not reflect or fulfill the evidence-based medicine and even the needs of the patients.

**Objectives:** The aim of this study is to evaluate the approach and treatment provided to migraineurs in emergency departments (ED) of private hospitals at Rio de Janeiro, Brazil.

**Methods:** Every migraine patient according to the IHS – II, attending the Headache Center of Rio and previously treated for an attack in an ED belonging to Hospital Copa D'Or, Quinta D'Or, Barra D'Or or Clinica São Vicente was included if able to describe medications used and time of permanence at the scene. Written treatment reports were also used as proof of care delivered. The hospitals are located in Rio de Janeiro Municipal area and were chosen because they considered as having high standards by most of the health plans.

**Results:** Forty one patients (31 women, 10 men, ages 20-76, mean 39.9 years) were included in the period of 2005-2012. The patients had an average headache frequency of 4.7 attacks/month (1 to 10) and 5 patients (3 women, 2 men) had migraine without aura and migraine with aura. The remaining patients had migraine without aura. The average time in the ED was 6,7 hours (2-13 h) and only 16 patients (39%) left the hospital with a higher than 50% relief in headache intensity. Eighty percent of the patients received IV metamizole (dipyrone) whereas 36,6% had IM tramadol and 46.3% received IV nonsteroidal anti-inflammatory medications (mostly tenoxican). Only 3 (7.3%) patients received injectable sumatriptan and 6 (14.6%) chlorpromazine. More than one drug was administered to 36 (87.8%) patients.

**Comments:** Although with poor evidence, tramadol is one of the mostly used medications in EDs of Rio de Janeiro for the acute treatment of migraine. Metamizole is cheap and well tolerated, but not very effective. Contrarily, sumatriptan is expensive while chlorpromazine usually demands attention and time during and after administration for patient's monitorization. Considering the small percentage of patients leaving the hospital with higher than 50% headache relief despite the long average duration of care, we suggest that even the high standard hospitals in Rio change their paradigm of treatment for migraine attacks. Medical education may be an useful way of improving that.

abouchkrym@uol.com.br