

POSTER PRESENTATION

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Increased levels of CGRP in peripheral blood in women with chronic migraine: A reliable biological marker

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Introduction

The biology of chronic migraine (CM) as a true entity or as a consequence of analgesic overuse is controversial. There are no available biological markers for CM, while CGRP, a marker of trigemino-vascular activation, has been shown to be increased during acute migraine attacks in episodic migraine [1].

Objectives

To determine CGRP levels in peripheral blood in a series of patients with CM as compared with matched subjects without a headache history.

Patients and methods

This series comprises 61 women meeting CM diagnostic criteria (IHC-II 2006 revised) with a mean age of 44 years (range 16-63) and 19 women (41 years, 22-55) without any headache history. CGRP levels were determined in blood samples obtained from right cubital vein between 9-12 am with an ELISA kit from USCN following manufacturer's instructions. Acute medication had not been taken the day before.

Results

CGRP levels were increased in women with CM (77.94 ng/ml, range 27.69-157.72) as compared to controls (40.39 ng/ml, range 20.08-70.75) (+93%; $p < 10^{-8}$).

Conclusions

CGRP levels are clearly increased in patients with CM, which is compatible with a permanent activation of

trigemino-vascular system in this entity. CGRP determination may constitute the first reliable biological marker for CM.

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Reference

1. Goadsby PJ, et al. *Annals Neurol* 1988, **23**:193-6.

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