

## **SC105. Monoclonal antibodies in patients with migraine. Experience in a headache service**

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### **Introduction**

Calcitonin gene-related peptide (CGRP) plays an important role in the pathophysiology of migraine through nociceptive mechanisms in the trigeminovascular system. Several studies demonstrate the safety and effectiveness of monoclonal antibodies (mAbs) against CGRP or its receptor as preventive treatment for episodic migraine (EM) and chronic migraine (CM).

### **Objectives**

To evaluate the experience of treatment with mAbs against CRGP pathway in patients with EM and CM evaluated at a headache service in Argentina.

### **Materials and Methods**

Retrospective, descriptive study. We reviewed electronic medical records of patients evaluated in our headache service with EM or CM who received Erenumab (70 or 140 mg) or Fremanezumab (225 mg) in monthly subcutaneous injections as preventive treatment of migraine between 07/2019 and 03/2022. The following information was obtained: age, sex, headache days/month (HDM), medication overuse headache, migraine preventive medication (in the previous month and at 3, 6, 12 months after starting treatment), type and dose of mAbs, adverse effects (AE) and response at 3, 6 and 12 months after starting treatment (reduction less than 30%, between 30 to 50%, greater than 50% or no reduction in HDM).

### **Results**

mAbs were indicated in 69 patients (86% women). 51 years average. 77% CM. 83% Erenumab and 17% Fremanezumab. 80% had failed to more than 3 oral preventive drugs. Topiramate and amitriptyline were the most used preventive medications. 72% used botulinum toxin previously. 5 patients did not return to control (1 EM, 4 CM). 15 patients with EM received treatment (14 Erenumab, 1 Fremanezumab). At 3 months 40% of EM had a reduction greater than 50% in HDM while 27% had no reduction. At 6 months 33% maintained a reduction greater than 50%. 13 patients completed 12-months follow-up: 8% had no reduction, 23% a reduction between 30 to 50% and 38% greater than 50% (of whom 60% was greater than 75%) while 31% discontinued treatment. 49 CM started treatment (41 Erenumab, 8 Fremanezumab). At 3 months 35% has a decrease greater than 50%, while 41% had no reduction. At 6 months 46% maintained a reduction greater than 50%. 30 patients completed 12-months follow-up: 13% had no reduction, 34% had a decrease between 30 to 50% and 50% of at least 50% (of whom 40% was greater than 75%). At 12 months 16 patients (53%) reverted from

CM to EM.14 discontinued: 9 because no response, 4 because costs, while 1 because fertility treatment.12 presented AE, constipation was the most frequent. All received Erenumab and no one had to stop treatment. 32 patients (50%) had MOH before treatment: 17 completed 12-months follow-up, 16 of them without MOH.

### **Conclusion**

In real world Erenumab and Fremanezumab are effective as preventive treatment for patients with EM and CM, even in those who failed with other treatments, including botulinum toxin. A reduction in the overuse of analgesic medication was registered. Good adherence and tolerance were observed, without discontinue treatment due to AE. It is necessary to consider mAbs treatment in patients with EM or CM who have not responded to previous treatments.