

## **SC112. Botulinum Toxin A in the preventive treatment of chronic migraine; experience in Argentine headache centre**

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### **Introduction**

Chronic migraine (CM), defined as at least 15 headache days per month, with a minimum of 8 of them with migraine features, during the last three months (ICHD). In 2010, the use of a Botulinum Toxin type A (BoNTA), was approved as a preventive treatment for this neurologic disease. Its use has spread and, currently, it corresponds to a pharmacological tool in patients with CM. Its main mechanism of action is by blocking the exocytosis of algogenic peptides and excitatory substances such as substance P, CGPR and glutamate, in the synaptic gap of nociceptive afferents. In our country there is scarce information published about the response to this treatment.

### **Objective**

The objective of this study is to describe our experience in the headache service in Argentina, with the administration of BoNTA as a preventive treatment for CM.

### **Materials and methods**

A retrospective analysis was performed by reviewing the digital medical records of all patients from the Headache Service, treated with BoNTA between January and December 2021. Patients  $\geq 18$  years old were included, with at least 1 application of BoNTA according to the dose and points included in the PREEMPT protocol. Epidemiological data, coexistence of acute headache medication overuse, duration of treatment (year of initiation, number of application), number of previous oral preventives received, evolution during treatment, number of headaches days per month, days of analgesics per month, were evaluated. We consider non responder patients if they had less than 30% reduction of headache days per month, after 3 treatment cycles. The review of adverse events and patient reported wearing off effect of the therapeutic benefit of BoNTA was registered. For data analysis, the STATA/14.0 program was used.

### **Results**

The records of 394 patients were analysed. 91% were female, mean age 46 (range: 18-85). 66% (n 241) had coexisting analgesic overuse. All patients had received at least one previous oral preventive treatment, with a median number of preventives of 3. 42% of the patients analysed were carrying out applications two years ago, 20% more than two years ago and 37% were starting treatment (1-3 applications). 82% (n 317) had already received 3 or more applications. 162 patients kept a headache diary, 65% of which responded with a  $\geq 50\%$  reduction in headache days/month and 15% had a  $\geq 30\%$  decrease in the frequency of headache days per month. 34% reversed the overuse of analgesics. 40% (n160) reported deterioration at the end of the dose, 4% (n15) reported

some adverse effect associated with the application, without being a reason for discontinuation of treatment.

### **Conclusions**

In local clinical practice BoNTA has an important role in the treatment of CM, high percentage of patients reduce the headache days per month and days of acute headache medication. It is an effective and well tolerated treatment for CM.