useful to reconsider the need for surgical intervention in patients with meningeal diverticula.
Conclusions: Meningeal diverticula, even if rare, are possible causes of SIH and medical treatment could be effective in such cases, since surgery is not always needed.

Consent for publication: the patient signed a written informed consent for the publication of this case report.
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Estimation of the Economic Burden and Labor Impact of Migraine in Spain: Results from the Spanish Atlas of Migraine Survey 2018

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Objectives: To estimate the average annual cost per patient and the impact on work t of migraine in Spain.
Material and Method: This is a prospective, online, anonymous, cross-sectional survey, conducted between June and September 2017, promoted by the Spanish Association of Patients with Headache (AEPAC) within the framework of the Spanish Atlas of Migraine 2018. People who completed the survey answered questions in relation to their migraine. A distinction was made between chronic migraine (CM) and episodic migraine (EM), considering the monthly headache days declared by patients. The economic burden of migraine was evaluated: direct health costs (including visits to specialists, medical tests, emergency visits, hospital admissions and medication), indirect costs (lost labor productivity), and those assumed by the migraineur. The labor consequences of migraine over the last year were analyzed. Chi-square and Mann- Whitney tests were used as contrast tests. Ethics Approval: A central ethics review board approved the study design.
Results: 1,281 people with migraine participated in the survey, 34.2% with CM, 88.2% women, with an average age of 37.3 (SD 11.5). The direct health costs for the last year were estimated at €3,847.29 for CM and €964.19 for EM (p<0,001). The costs assumed by the patient in the last year were €1,609.89 for CM and €878.04 for EM (p<0.001). The indirect cost was estimated at €7,464.83 for CM and €3,199.15 for EM (p <0.001). The total average cost per patient/year rised to €12,922.01 for CM and €5,041.41 for EM (p<0.001). Regarding the job status: 62.2% with EM and 49.0% with CM were working, 2.6% with EM and 9.1% with CM were on sick leave and 12.2% with EM and 16.8% with CM were unemployed (p <0.05). In the last year, because of migraine, 17.8% of patients with EM and 27.2% with CM (p<0.01) requested days of leave or leave of absence, and reduced their working hours 8.5% with EM and 11.1% CM (p=0.270). Labor efficiency was reduced in 61.1% of patients with EM and 65.7% with CM (p=0.257).
Conclusion: Migraine represents an important economic burden in Spain, particularly in patients with CM. Migraine causes important productivity losses resulting from absenteeism, presentism, decreasing the working hours and the probabilities to keep working, and its impact is significantly greater in CM.

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Chromig10: evolution of migraine after 10 years

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Objective
To analyse the evolution of a cohort of patients with migraine after 10 years, focusing on prognostic factors of improvement and worsening.
Methods
Cross-sectional analysis of the cohort of migraine patients from the *Chromig* study after 10 years. Using an online survey we collected demographic data, comorbidities, characteristics, treatment, impact of migraine (HIT-6, MIDAS, BDI, SF-36) and subjective impression of evolution. Initial and after-10-years data was compared. A reduction ≥25% in headache days/month was considered as improvement. A comparative study was carried out to identify predictors of improvement or worsening.
Results
Data was collected from 380/1109 patients (34.3%): 77.1% women; mean age 49.2 ± 10.5 years; 73.9% initial diagnosis of episodic migraine (EM). After 10 years: patients have more arterial hypertension (6.1% *vs.* 13.2%), less anxiety (57.5% *vs.* 22.9%) and depression (36.1% *vs.* 13.9%) (p<0.05). A 20.8% of women have gone through menopause. There is 66.8% reported subjective improvement of their migraine. Mean frequency of headache improves (9.6±8.5 *vs.* 2.9±4.2 headache-days/month p<0.001), 80.7% decrease in frequency ≥25%, (from these ten years ago, 43.3% had low-frequency EM; 24.6% high-frequency EM; 23.9% chronic migraine; 8.2% chronic daily headache (p<0.001)), which correlates with a lower proportion of high- frequency EM (22.1% *vs.* 7.7%), chronic migraine (15.9% *vs.* 2.6%) and chronic daily headache (6.6% 0 *vs.* 0.3%) (p <0.001); as well as with an improvement in impact (HIT-6) and quality of life (SF-36) (p<0.05). The factors associated with improvement are: baseline frequency >10 days/month, change in routines and menopause onset (p<0.05). In the multivariate analysis, the factor independently associated with improvement is the baseline frequency >10 days/month (OR:1.268, p=0.005). The factor associated with no improvement after 10 years is going through mourning (p<0.05). As additional results of the analysis, we observed a reduction in the use of preventive treatment (48.7% *vs.* 23.5%) and an increase in monotherapy (42.2% *vs.* 72.7%) (p<0.001). 44.4% of patients don't have a medical follow-up for their migraine.
Conclusion
After 10 years, patients with migraine improve, especially those who 10 years ago had a high-frequency of headache days/month. Other than the natural pathophysiology of migraine, the factors which correlate with this improvement are a change in life habits and the onset of menopause.

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WHOLE GRAIN CEREAL CONSUMPTION REDUCES MIGRAINE RELATED DISABILITY

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