TREATMENT OF CHRONIC LOW BACK PAIN WITH TAPENTADOL

D. Cancho, D.R. Zamudio, S. Ortiz, D.R. Delgado, G. Agámez, C. Nieto.

BACKGROUND: Chronic low back pain affects around 23% of the European adult population. Often has an associated neuropathic pain component that makes more difficult pain management. Tapentadol represents a new class of centrally acting analgesic with 2 mechanisms of action, u-opioid receptor agonism and noradrenaline reuptake inhibition, this dual and synergistic mechanism contributes to its efficacy in the treatment of nociceptive and neuropathic pain. However, its role in the treatment algorithm is yet to be determined. The aim of this study is to evaluate the characteristics of neuropathic pain among patients with chronic low back pain that will receive tapentadol, and examine the effectiveness and safety of this treatment.

METHODS: 19 patients with chronic low back pain that would receive tapentadol 100-150 mg were interviewed (6 males and 13 females). Interviews were made the day before treatment initiation and four months after. In the first meeting DN-4 and LANSS scores were used to measure neuropathic pain, SF-12 questionnaire for health status and VAS to assess pain intensity. In the second meeting, four months after the beginning of the treatment, SF-12 questionnaire and VAS were used to determine progression and impact of the treatment. Other data collected were age, sex, adverse effects and reasons for discontinuation. Wilcoxon test was applied for statistical analysis.

RESULTS: According to DN4 questionnaire 15 patients (79%) presented neuropathic pain prior to starting therapy (median 4; range 9; 95%CI= 3,39-5,98). In 12 patients (63%) neuropathic mechanisms were likely to be contributing according to LANSS score (median 13, range 24, 95%CI 8,55-15,45). Adverse effects leading to discontinuation were observed in three patients (nausea in 1 patient and anxiety in 2). Finally, 10 patients had improvements in VAS ($p < 0,01$) and all SF-12 parameters ($P < 0,01$).

CONCLUSION: The majority of our patients that were going to be treated with tapentadol in our Service presented neuropathic pain characteristics. No severe adverse effect was observed throughout the study. Most of our patients showed a decrease in VAS score and an improvement in quality of life according to the SF-12 questionnaire. In our experience tapentadol is effective and safe in the treatment of chronic low back pain.

SOURCES:

1- Humbría Mendiola, L. Carmona, José L. Peña Sagredo, A.M. Ortiz. Impacto poblacional del dolor lumbar en España: resultados del estudio EPISER. Revista Española de Reumatología. 2002; 29:

2- Bartleson JD. Evidence for and against the use of opioid analgesics for chronic nonmalignant low back pain: a review. Pain Med. 2002;3:260–271.

3- Tzschentke TM, Jahnle U, Kogel B, et al. Tapentadol hydrochloride: a next-generation, centrally acting analgesic with two mechanisms of action in a single molecule. Drugs Today (Barc). 2009;45:483–496.

4- Lange B, Kuperwasser B, Okamoto A, et al. Efficacy and safety of tapentadol prolonged release for chronic osteoarthritis pain and low back pain. Adv Ther. 2010;27:381–399.