

ABSTRACT

Topic: Rational pharmacotherapy of osteoarthritis in older age

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Introduction: Osteoarthritis (OA) is a chronic degenerative disorder. Its prevalence increases with processes of ageing and causal possibilities of pharmacological treatment are limited. Pharmacotherapy focuses mainly on symptomatic treatment of pain which should not be underestimated, but adequately treated.

Goal: The aim of the rigorous thesis was to evaluate, in a group of ambulatory geriatric patients suffering from osteoarthritis and visiting general practitioners' offices, which medicinal products they use on prescription or as over-the-counter for the treatment of pain in OA. Another aim was to document how patients subjectively evaluate the efficacy of these medications (ie, how long does it take to experience the analgesic effect, how high is the maximum reduction of the intensity of pain, and how long does the analgesic effect last).

Methods: The study included 204 geriatric patients in the age of 65 years and older who were treated for osteoarthritis in three general practitioners' offices in Uherské Hradiště, Czech Republic. These were patients visiting the GP in the period of data collection, who agreed to participate in the study and signed the informed consent. Data collection was in motion from July 1, 2018 to June 30, 2019, using questionnaire (preliminary piloted on a small sample of respondents) that included sociodemographic characteristics, basic information on treatment strategies of OA and complex characteristics related to pain in OA. Pain intensity and pain relief were assessed using a visual analog scale (VAS). The study was approved by the Ethics Committee of the Faculty of Pharmacy of the Charles University.

Results: Almost all patients in the treatment of osteoarthritis were using at least one analgesics prescribed by physician (97.1 %), other had OA diagnosed, but did not suffer from pain and did not use analgesics. A large percentage of patients considered treatment prescribed by physicians as effective (87.9 %). About one third of the patients were treated by

polypharmacy (29.9 %) or excessive polypharmacy (2 %). The most frequently prescribed medications were meloxicam 15 mg, nimesulide 100 mg and fixed dose combination of paracetamol/tramadol 325/37.5 mg. From OTC drugs, mostly used was paracetamol 500 mg tbl., ibuprofen 400 mg tbl. and diclofenac sodium gel (10 mg/g). Among the most effective analgesics (according to intensity of pain relief), patients evaluated tramadol 50 mg. The onset of analgesic effect within 30 minutes was very rare, most of the medications acted within 60 minutes (particularly: nimesulide 100 mg and fixed dose combinations of paracetamol/tramadol 325/37.5 mg or 650/75 mg). Patients also reported that the duration of analgesic effect lasted usually 8 to 12 hours (particularly for nimesulid 100mg 2tbl/day, meloxicam 15mg 1tbl/day and fixed dose combination of paracetamol/tramadol 650/75mg 2tbl/day).

Conclusion: The majority of patients considered treatment of osteoarthritis prescribed by physician to be effective. Significant differences were observed among medicinal products in the subjective onset of analgesic effect, intensity and duration of this effect. With regard to subjective character of pain and subjective efficacy of analgesics, close communication between physician and patient is necessary. Our study provides important feedback for improvement of treatment strategies in daily ambulatory care in patients with OA.

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