

ABSTRACT :

INTRODUCTION : Osteoarthritis (OA) is a degenerative disease that predominantly affects geriatric population. However, geriatric patients are not often treated according to specific geriatric recommendations. OA also belongs to highly prevalent disorders managed mostly by symptomatic, analgetic drug treatment. The aim of this diploma thesis was to evaluate to which extent are clinical guidelines for management of OA focused (generally and in areas of individual pharmacotherapeutic strategies) on specific aspects of rational geriatric pharmacotherapy. Diploma thesis was completed as a recherche thesis (part I.) for follow-up studies dealing with rationality of analgetic drug treatment in older patients (rigorous thesis of M. Miklasová MS, Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University in Prague, 2016).

METHOD : 4 national and 3 international clinical guidelines for management of osteoarthritis in accessible languages, published between 2005 and 2014 years, were identified by literature search conducted between 9/2015- 3/2017. Following guidelines were included : czech (2012), german (2009), australian (2009), american (2012) and recommendations of international societies OARSI (2008-2010), EULAR (2005, 2007) and NICE (2014). This diploma thesis summarizes in tables main differences in methodology of development of these guidelines (number of experts, methods, covered areas, geriatric approaches and others). For individual pharmacotherapeutic strategies it further compares individual recommendations and evidence on their efficacy and safety.

RESULTS : For chronic management of OA is paracetamol certainly in all clinical guidelines the drug of choice , because it is well-tolerated in older patients. Traditional nonsteroidal antiinflammatory drugs, as the second line of treatment, are appropriate for short term therapy. Opioids were recommended by individual guidelines for more intensive pain (or in case of inefficacy of the first line therapy), however, efficacy of various opioids is highly different. Hyaluronic acid and glucocorticoids were discussed as an option particularly for short term treatment of osteoarthritis. Clinical guidelines were in agreement that there is not enough evidence to recommend common use of SYSADOA and most of the guidelines do not discuss or do not recommend to use metamizol. Although all clinical guidelines declare that patients should be treated in complexity and drug therapy must be highly individualized, they

are not much focused on specific features of rational geriatric pharmacotherapy, e.g. dose adjustment in multiple drug regimens, geriatric frailty and other frequent pharmacotherapeutic risks (changes in function of elimination organs, other changes in pharmacokinetics and pharmacodynamics, etc.)

CONCLUSION : In the group of patients suffering from OA, 80-90% patients are at geriatric age. Specific features of geriatric pharmacotherapy in published clinical guidelines for OA were underestimated. In the future, there should be guidelines aimed better at specific aspects of rational geriatric pharmacotherapy (especially guidelines for management of disorders specific for higher age, like OA is) and clinical pharmacists should be more involved in multidisciplinary expert teams developing these guidelines.