

27th Scientific Symposium of the Austrian Pharmacological Society Vienna, 29–30 September 2023

MEETING ABSTRACT

A2.9

Consumption of drugs in the therapy of hypothyroidism in the Republic of Serbia in the period from 2009 to 2020

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Background: Hypothyroidism is a chronic disease characterized by triiodothyronine and thyroxine deficiency. A third of the world's population lives in areas that are deficient in iodine. The number of recorded cases of hypothyroidism is also increasing among the population of iodine-sufficient countries. Achieving a euthyroid state was made possible by oral administration of levothyroxine. The average dose for an adult is 1.6 µg/kg of body weight per day. The aim of this study was analysis of the use of drugs in the treatment of hypothyroidism in the Republic of Serbia in the period from 2009 to 2020 and comparison of the obtained results with the consumption of the same group of drugs in Finland and Croatia.

Methods: Data on drug consumption in the period from 2009 to 2020, as well as drug prices, were obtained from the official website of the Agency for Medicines and Medical Devices of the Republic of Serbia, for Croatia from the official website of the Agency for Medicines and Medical Products, and for Finland from the official website of the Finnish Medicines Agency. The consumption of drugs was monitored by the internationally accepted ATC/DDD methodology. The total amount of consumed drugs was expressed as the number of defined daily doses per 1000 inhabitants per day (DDD / 1000 inhabitants / day).

Results: A trend of increasing consumption of levothyroxine was observed in all countries in the period from 2009 to 2020. In the Republic of Serbia, levothyroxine consumption was four times higher in 2020 compared to 2009. In Croatia a similar trend in the consumption of levothyroxine was observed, while in Finland, the consumption of this drug in the same period is not characterized by a drastic, but a more gradual increase.

Discussion: The use of levothyroxine is widespread in all the countries studied. In Serbia, in 2020, compared to 2009, it almost quadrupled. Croatia records a similar trend, while in Finland a slight increase was observed, with a higher rate of drug use in 2009. A difference in the prices of this medicine was noticed in the Serbia and the other two investigated countries. Also, a clear difference was observed in the costs of applying levothyroxine on an annual basis in Finland compared to Serbia and Croatia.

Keywords: drug consumption – hypothyroidism – levothyroxine

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