THE PREVALENCE OF ENVIRONMENTAL MYCOBACTERIA IN DRINKING WATER SUPPLY SYSTEMS IN OLOMOUC COUNTY, NORTH MORAVIA, CZECH REPUBLIC, IN THE PERIOD 1984-1989

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SUMMARY

The presence of environmental mycobacteria was studied in drinking water supply systems in Olomouc County, Czech Republic, in order to detect the possible spread of M. kansasii from the neighbouring region in Ostrava County. Drinking water samples from water supply systems of 16 localities were investigated.

The samples of running water, and tap swabs or tap scrapings were collected twice a year, in the spring and in the autumn. The most common cultivated and identified species were M. gordonae (20.4 %), M. flavescens (13.8 %), rapidly growing mycobacteria (5.0 %) and then by occasional identification of M. fortuitum, M. terrae, M. serofaciens. M. kansasii was not detected. The prevalence rates showed no time trend over the period 1984-1989. We conclude that there is no evidence at present that endemic M. kansasii, isolated repeatedly from neighbouring region, has spread to Olomouc County. Different environmental and nutritional constituents in soil and coal mine dust in the endemic regions seem to be the most probable limiting environmental factor of the endemic occurrence of M. kansasii in its endemic locality in Ostrava and Karviná regions.

Keywords: prevalence, environmental mycobacteria, drinking water, endemic

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