

CRYPTOSPORIDIUM SPP. IN FAECAL AND WATER SAMPLES IN AUSTRIA

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Several cases of cryptosporidiosis have been found in patients and in animals, and *Cryptosporidium parvum*-oocysts were detected in water samples in Austria during the last years. In a retrospective study the reliability and the efficiency of different techniques for the detection of *Cryptosporidia* in different kinds of samples were investigated and verified, and the distribution of three *Cryptosporidium* species in Eastern Austria was determined.

Oocysts of *Cryptosporidia* were detected by appropriate staining techniques, enriched by immunomagnetic isolation, and differentiated by a modular arranged gene amplification procedure. Epidemiological data were accumulated and processed statistically.

Standard staining techniques for the detection of *Cryptosporidia* are unsuitable in epidemiological studies, mostly due to insufficient sensitivity and the lack of any ability for a species differentiation. *Cryptosporida* are found in all kinds of samples in a bimodal seasonal distribution pattern. Drinking water from protected sources in sparsely inhabited areas is rarely contaminated with these parasites. Moreover, the occurrence of *Cryptosporidium* in Austria is probably more associated with high human population densities in an area than with cattle breeding or water recycling.