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PREVALENCE AND SPECIES DISTRIBUTION PATTERN OF SUPERFICIAL FUNGAL INFECTIONS IN THE NIŠAVA DISTRICT, SERBIA

Marina Randjelović[1,2], Milan Golubović[3], Marko Stalević[4], Maša Golubović[5], Snežana Mladenović-Antić[1,2], Milica Djordjević[1,2], Jelena Randjelović[6], Aleksandra Ignjatović[2,7]

An assessment of distribution patterns of infectious disease causative agents is crucial in cases of infections managed empirically, without laboratory-based evidence.

The study aimed to explore the prevalence of superficial fungal infections (SFI) and identify the most common causative agents.

This study included a mycological examination of skin and adnexa samples of patients with clinical symptoms and signs of SFI. Standard mycological methods, microscopy and cultivation, were used for the detection and identification of causative agents. Dermatophytes were determined based on macroscopic and microscopic morphological characteristics to genus or species level, while the identification of yeast species was done by using commercial Integral System YEASTS plus (Liofilchem®, Italy) tests. The results were elaborated with the statistical method of descriptive and quantitative analysis (SPSS 14.0 for Windows 2003).

Statistical analysis revealed a high prevalence of SFI (30.2%), with a significant difference observed concerning patients' age ($p < 0.001$), while no significant difference was noted regarding patients' gender ($p = 0.504$). SFI did not exhibit a seasonal pattern ($p = 0.783$). Superficial fungal infection was confirmed by isolating and identifying fungi in 188 patients (15.1%). *Candida* spp. were isolated from 113 patients (60.1%), with *Candida albicans* identified as the causative agent of superficial candidosis in 46 patients (40.7%), while non-*albicans Candida* (NAC) species were detected in significantly more patients (59.3%). Dermatophytoses were diagnosed in 75 patients (39.9%), with *Microsporum canis* being the predominant species (38.7%).

The increasing incidence of superficial yeast infections caused by previously classified NAC species underscores the necessity for mycological analyses to determine the etiology of SFI and evaluate the *in vitro* effectiveness of antimycotics. The notable prevalence of zoophilic dermatophyte species highlights the imperative for epidemic and epizootic preventive measures.

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