Trichophyton rubrum's prevalence in diabetic foot treated at Dr. Waldomiro Colautti Hospital in Ibirama

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Abstract:
Diabetes mellitus has a high incidence in the world population, among the most serious complications of this condition are the dermatophytoses and diabetic foot. The diabetic foot is a common cause of hospital admissions and associated dermatophytosis present in these individuals often can make the toughest wounds to available treatments. In most cases treated in hospitals, cultures are not performed to identify the presence of fungi in the wounds of diabetic foot only bacteriological cultures are performed. This research aimed to identify the prevalence of Trichophyton rubrum in diabetic foot wounds treated at Dr. Waldomiro Colautti Hospital in the city of Ibirama-SC, from June 2014 to May 2015. Samples were collected by a nurse during the dressing procedure, being removed from the wound edge of the material. After collecting the samples were sent in Petri plates containing medium Sabouraud at the microbiology laboratory and grown at a temperature of 28.8 ° C for 7 days, after this period were isolated fungi and micro-cultivation performed on microscope slides for later identification. During this period 11 diabetic patients sought hospital care because of diabetic foot complications, all passed through the dressing procedure. Of these 11 patients, there was no fungal growth 2 of the collected sample, and the 9 positive samples, only 2 have been identified as Trichophyton rubrum. This information was given to the hospital's infectious disease physician, and a reassessment of the therapeutic management was possible by entering the use of antifungal oral and topic during dressing, reducing the length of stay, and reducing the risk of amputation in these patients. But the resistance to antifungal agents is common phenomenon in diabetics, significantly increasing the morbidity in these patients. Thus, further studies are necessary in order to elucidate the mechanism of resistance of fungal strains to inhibitors, and develop new and more effective antifungal agents.

Keywords: Diabetic foot; Trichophyton rubrum; Dermatophytoses.