

Abstract

Urticaria is one of the common skin conditions that affect 15-25% of the population at some point in their lives. In 70-90% of cases of chronic urticaria the etiology is not apparent. Among the known causes fungal infections are important as specific therapeutic interventions can be adopted.

Objective

This study was conducted to detect the superficial fungal agents in patients with chronic urticaria and to compare the prevalence of superficial fungal infections with age matched healthy controls.

Materials and methods

148 patients with chronic urticaria (38.5% male and 61.5% female) and 148 controls without urticaria (60.1% male and 39.9% female) participated in the study between January 2009 and April 2009. Mean age of the patients and controls were 33.7 and 31.4 years respectively. Skin and nail scrapings were collected from lesions in cases and controls and examined by direct microscopy in KOH and by culture in Sabouraud's Dextrose agar. Sera from a selected sample of patients (n= 66) and controls (n=34) were tested for specific IgE for *Candida albicans*.

Results

In 66 patients (44.6%) and 34 controls (23%) a superficial fungal infection was clinically detected and the direct smears of the scrapings were positive in 31 cases and 15 controls. Yeast(38.7%) and filamentous fungal infections (29%) were commoner among cases than in controls (20% and 13.3% respectively in) while a larger proportion of controls

had *M. furfur* infections (66.7% compared to 32.3% in cases). *Candida* species was the commonest isolate in cultures in both cases and controls. Specific IgE for *C. albicans* was detected in two out of three patients who had *C. albicans* culture positive lesions in cases while none became positive in controls.

Conclusion

The clinical evidence of a superficial fungal infection was significantly higher in cases than the control group ($p < 0.001$). This data suggests that screening for fungal infections is recommended in patients with chronic urticaria.