INTRODUCTION

Vernal keratoconjunctivitis (VKC) patients have an elevated incidence of growth hormone deficiency and thyroid diseases. Nevertheless, no auxological data are available in these subjects. The purpose of this study was to evaluate the auxological features in a cohort of patients with VKC.

METHODS

This study included 179 Caucasian VKC patients (119 males, 60 females; mean age 9.63 ± 2.98 years) who were evaluated using standard deviation scores (SDSs) for prepubertal height (PrH), pubertal height (PH), body mass index (BMI), final height (FH), target height (TH), FH minus PrH, and FH minus TH. The control group was 274 Italian children and adolescents (185 males, 89 females; mean age 9.41 ± 3.58 years).

RESULTS

Patients grew better than controls and had significantly higher height SDSs (P < 0.005). However, their PrH SDSs were not significantly different than their PH SDSs or their TH SDSs. Nevertheless, they had significantly higher PrH and PH SDSs than healthy controls (PrH P < 0.005; PH P < 0.05), whereas FH SDSs and TH SDSs were not different. Finally, weight excess percentage was significantly lower in VKC patients compared to controls (10.6% vs 31.7%, P < 0.005), and significantly lower body mass index SDS than controls (P < 0.001). These differences were maintained when VKC patients were divided by sex (female P < 0.001, male P < 0.001), even if there was a higher frequency of overweight and obesity in prepubertal versus pubertal VKC patients, particularly in the females.

CONCLUSIONS

VKC patients expressed particular auxological features differently than healthy controls, particularly higher height SDSs and lower body mass index SDSs.