

## Tinea versicolor in a 69-year-old man: an uncommon finding

Alexander K. C. Leung<sup>\*1</sup>, Benjamin Barankin<sup>2</sup>

<sup>1</sup>Clinical Professor of Pediatrics, The University of Calgary, Pediatric Consultant, The Alberta Children's Hospital, Calgary, Alberta, Canada

<sup>2</sup>Dermatologist & Medical Director, Toronto Dermatology Centre, Toronto, Ontario, Canada

### \*Corresponding author

Alexander K. C. Leung

Email: [aleung@ucalgary.ca](mailto:aleung@ucalgary.ca)

**Abstract:** Tinea versicolor most commonly affects adolescents and young adults. The occurrence in an elderly individual is considered rare. We herewith report a case of tinea versicolor that occurred on the arms, neck, and chest of a 69-year-old man.

**Keywords:** Tinea versicolor, pityriasis versicolor, *Malassezia* species, elderly individual.

### INTRODUCTION

Tinea versicolor (also known as pityriasis versicolor) is a superficial infection of the skin caused by dimorphic lipid-dependent yeasts in the genus *Malassezia* (formerly known as *Pityrosporum*), notably *Malassezia globosa*, and, less commonly, *M. furfur* and *M. sympodialis* [1,2]. These yeasts are normal commensals on the skin surface. Skin colonization increases with age; 25% of children and almost 100% of adults are affected [3]. Tinea versicolor occurs when the yeast form of the organism converts to the hyphal form. Predisposing factors for the conversion include a hot and humid environment, excessive sweating, skin occlusion, an excess of lipid-containing sebaceous secretions, malnutrition, poor general health, oral contraceptives, immunosuppression, and genetic predisposition [3]. The condition is most common among adolescents and young adults [1]. We herewith report a case of tinea versicolor in a 69-year-old man. To our knowledge, the occurrence of tinea versicolor in an elderly individual is considered rare.

### CASE REPORT

A 69-year-old Caucasian man presented with numerous hyperpigmented lesions on the upper arms, neck, and chest of approximately 7 months' duration. The lesions were asymptomatic but the number and sizes of the lesions increased over time. There was no other cutaneous or systemic complaints. His past health was unremarkable and he was not on any medications. The patient had not been exposed to other individuals affected by the same condition.

Physical examination revealed numerous sharply demarcated brownish macules and patches on the proximal upper arms, neck, and chest (Figure 1). The size of the lesions ranged 3 to 8 mm in diameter.

The lesions were covered with a fine scale. The rest of the physical examination was normal.



**Fig-1: Tinea versicolor presenting as numerous brownish macules on the chest of a 69-year-old man.**

Based on the clinical appearance of the lesions, a diagnosis of tinea versicolor was made by his dermatologist. He was treated with terbinafine spray nightly for 3 weeks and oral itraconazole 100 mg twice a day for 1 week. Reassessment two months later revealed entirely normal appearing skin and no presence of tinea versicolor.

### DISCUSSION

Tinea versicolor is characterized by scaly hypo- or hyperpigmented macules/patches, most commonly affecting areas of skin that are rich in sebum production, such as the upper arms, neck, and trunk, as is illustrated in the present case. Typically, lesions arise as multiple small, circular macules that enlarge radially and coalesce into patches. The eruption varies in color

from patient to patient, but each person's lesions are of a single hue. In general, hyperpigmented, red to brown lesions erupt in fair-skinned patients whereas those with dark skin tend to have hypopigmented lesions [3]. The lesions are covered with a fine scale and are typically asymptomatic, although some patients complain of mild pruritus.

The diagnosis is usually clinical. If necessary, a potassium hydroxide evaluation can be performed; examination of scrapings from lesions reveals numerous short, stubby, hyphae intermixed with clusters of spores (the so-called "spaghetti and meatballs" appearance). Wood lamp examination may show yellowish gold fluorescence, although some lesions do not fluoresce [3].

It is generally believed that tinea versicolor is most common among adolescents and young adults [1]. Faergemann and Fredriksson surveyed 20,962 new patients seen at the Department of Dermatology at the Central Hospital in Sweden and identified 232 patients (166 males and 166 females) with tinea versicolor [4]. The age ranged from 10 to 65 years; most patients were between 20 and 45 years of age. Belec et al studied the prevalence and epidemiologic characteristics in a randomized population of 870 adults (418 males and 452 females) with tinea versicolor in the Central African Republic [5]. The mean age of the patients was 34.5 years (15 to 65 years). Rao et al recruited 120 patients (88 males and 32 females) with tinea versicolor who attended the outpatient Department of Dermatology in the Kasturba Medical College Hospital in Mangalore, India to study their clinical features, age and sex distribution, relation to climate, and personal habits of affected patients [6]. Age of the patients ranged from 2 to 66 years; 30% of the patients belonged to the age group 21 to 30 years which was the commonest age group involved. Ghosh et al recruited 110 consecutive patients (65 males and 45 females) with tinea versicolor seen at a tertiary care hospital in Kolkata in India to study the clinical patterns and epidemiological characteristics of tinea versicolor [7]. Most of the patients were young adults. The disease was rare in patients over 50 years of age; the exact age of the eldest patient was not specified. To study the epidemiology of tinea versicolor in China, He et al recruited 503 outpatients (346 males and 157 females) with tinea versicolor, referred to the First Affiliated Hospital of Anhui Provincial Hospital between January and November 2005 [8]. The mean age of patients was  $24.95 \pm 11.15$  years (range 62 days to 61 years). To study the epidemiology of tinea versicolor in Adana, Turkey, Karakas et al recruited 97 patients (65 were males and 32 females) with tinea versicolor who came to the outpatient clinic of the Department of Dermatology at the Faculty of Medicine, University of Cukurova in Turkey [9]. The mean age of patients was with  $42.2 \pm$

23.6 years (range 13 to 60 years). The age groups mainly affected were those between 16 and 30 years of age. To examine the prevalence of *Malassezia* species in affected and unaffected skin in Israeli patients with tinea versicolor, Lyakhovitsky recruited 75 patients (40 males and 35 females) with tinea versicolor who visited their outpatient clinic [2]. The age of patients ranged from 18 to 65 years.

From the literature review, it seems that tinea versicolor rarely occurs in individuals over 65 years of age. We herewith report a 69-year-old man with tinea versicolor. We are under the impression that the occurrence of tinea versicolor in the elderly, although rare, is more common than is presently appreciated.

#### REFERENCES

1. Goldstein BG, Goldstein AO; Tinea versicolor (pityriasis versicolor). In: Post TW, ed. Up To Date Waltham, MA. (Accessed on June 20, 2015)
2. Lyakhovitsky A, Shemer A, Amichai B; Molecular analysis of *Malassezia* species isolated from Israeli patients with pityriasis versicolor. *Int J Dermatol*, 2013;52:231-233.
3. Leung AK. Pityriasis versicolor. In: Lang F, ed. *The Encyclopedia of Molecular Mechanisms of Disease*. Berlin: Springer-Verlag, 2009;1652-1654.
4. Faergemann J, Fredriksson T; Tinea versicolor with regard to seborrheic dermatitis: an epidemiological investigation. *Arch Dermatol* 1979;115:966-968.
5. Belec L, Testa J, Bouree P; Pityriasis versicolor in the Central African Republic: a randomized study of 144 cases. *J Med Veter Mycol*, 1991;29:323-329.
6. Rao GS, Kuruville M, Kumar P, Vinod V; Clinico-epidermiological studies in tinea versicolor. *Indian J Dermatol Venereol Leprol*, 2002;68:208-209.
7. Ghosh SK, Dey SK, Saha I, Barbhuiya JN, Ghosh A, Roy AK; Pityriasis versicolor: a clinicomycological and epidemiological study from a tertiary care hospital. *Indian J Dermatol* 2008;53:182-185.
8. He SM, Du WD, Yang S, Zhou SM, Li W, Wang, J, et al. The genetic epidemiology of tinea versicolor in China. *Mycosis*, 2007;51:55-62.
9. Durdu M; Epidemiology of pityriasis versicolor in Adana, Turkey. *J Dermatol* 2009;36:377-382.