

Trichomycosis axillaris: Case report

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ABSTRACT

Trichomycosis axillaris is a bacterial infection commonly caused by *Corynebacterium*. This condition usually affects the axillary and pubic hair, but it also can be seen on the scalp. It may have three different presentations: trichomycosis flava, rubra and nigra; it is characterized by the presence of concretions around the hair. Despite it is not uncommon, doctors outside of dermatology underdiagnosis this condition of the skin. Herein, we report a 70-year-old male patient, who visited the clinic for a post-lesional melanoderma affecting the right armpit. During the physical examination he was found to have a trichopathy localized at the axillary hair, consisting of multiple yellow axillary hairs. Dermoscopy and microscopy showed sheath and nodules around the hair. With these clinical features the patient was diagnosed with post-lesional melanoderma and axillary trichomycosis.

Key words: Hair diseases, *Corynebacterium* infections, *Corynebacterium*

INTRODUCTION

Trichomycosis axillaris is an uncommon asymptomatic bacterial infection habitually caused by *Corynebacterium* [1-8]. It mainly affects the armpit hair, although it can also affect the pubic and perianal region hair and, exceptionally, the scalp. It is prevalent in hot and humid climates and it is associated with poor hygiene and hyperhidrosis [1-4,6-8]. It may have three different presentations: trichomycosis flava, rubra and nigra. The trichomycosis flava is the most frequent, and it is characterized by the presence of yellow, sticky and smelly concretions and nodules around the hair [1-8]. The diagnosis is established through an adequate history and correct physical examination, that includes performing techniques such as Dermoscopy, Wood's light and Microscopy, which shows sheath and nodules around the hair as a transparent rosary of crystalline stones [1-8].

CASE REPORT

We present a case of a 70-year-old man, who was referred to the clinic for presenting a macula in the armpit, after

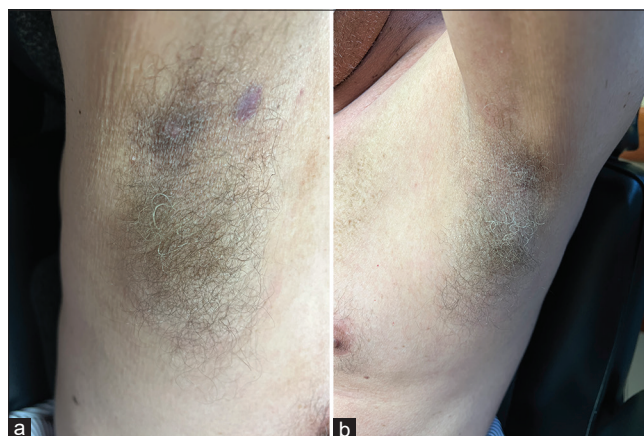


Figure 1: (a and b) Multiple yellow axillary hairs and a purplish macula in the right armpit.

applying deodorant. During the physical examination, a well-defined macula of violet-red coloration was evidenced, as well as a trichopathy, consisting of multiple yellow axillary hairs (Figs. 1a and 1b). Dermoscopy showed the presence of multiple nodular concretion and pods around the hair (Figs. 2a and 2b). Microscopy with lactophenol blue solution showed sheaths and blue nodules around the hair (Figs. 3a and 3b). Rest of the physical examination evidenced cellular nevi,

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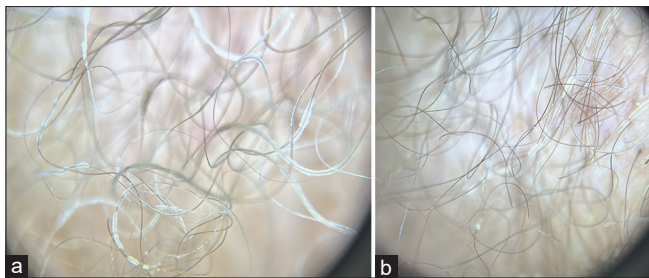


Figure 2: (a and b) Dermoscopy shows sheaths and nodules around the hairs.

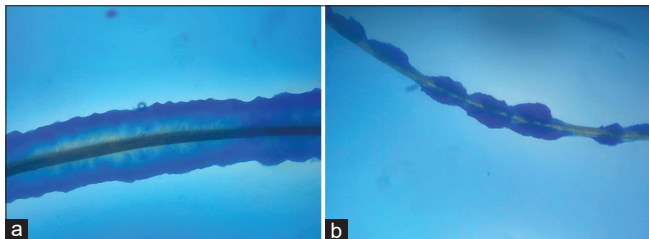


Figure 3: (a and b) Microscopy with lactophenol blue solution shows the sheath and blue pods around the hair.

ruby nevus, seborrheic keratosis, venous insufficiency and dry skin.

Patient reported that he had personal history of Diabetes type 2, treated with glibenclamide and metformin.

This trichopathy was an incidental finding on dermatological examination for another reason. With these clinical features, the diagnosis of post-lesional melanoderma and axillary trichomycosis was made. It was recommended to shave the axillary hair and apply fusidic acid three times a day for ten days.

DISCUSSION

Trichomycosis Axillaris, also called Trichobacteriosis or bacterial trichonodosis, is an uncommon superficial infection caused by *Corynebacterium* (*C. tenuis*, *C. propinquum*, *C. flavescentis*) or *Serratia marcescens* [1-8]. It normally affects the hair of the armpit, followed by the pubic and intergluteus hair, and hardly seen on the scalp [1-4,6-8]. This trichopathy is associated with poor hygiene, humidity, obesity, hyperhidrosis, and tropical climates; in addition, it is reported more frequently in adolescents and young adults, and there are no differences with respect to the race or gender [1-8]. The infection is caused by physical contact between the bacteria and the surface, or cuticle of the hair, using a cement-like substance, that is synthesized by both the apocrine glands of the

host and the microorganism; there have been reports of man-to-man transmission [2,5-7].

This condition is clinically characterized yellowish (flava variant), and less frequently, reddish (rubra variant) or blackish (black variant), sticky and smelly concretions (hair-nodules) surrounding the hair shaft. These nodules can extend along the entire length of the hair, forming a sheath, causing the hair to thicken and change its texture. Most of the patients presents associated symptoms like hyperhidrosis, itching, rash and change in odor [1,4,7,8].

The diagnosis is based on the clinical history and physical examination. Dermoscopy usually shows soft and waxy hair nodules around the hair as a transparent-yellow rosaries of crystalline stones [2-5,8]. Microscopy reveals bacterial masses, resembling little drumsticks, limited around the hair, but never perforate it [3-5,7,8]. Wood's light is useful for delineating the extent of the trichopathy, it shows a typical yellowish-green fluorescent areas [1-5,7,8]. Culture of *Corynebacterium* is difficult and not necessary for diagnosis [3,5,8]. Treatment includes shaving the affected area; drying agents, as inert powders, to avoid fungal infection; topical anti-bacterial preparations containing any of the following: clindamycin, erythromycin, fusidic acid; as well as a topical treatment with sulfur, formalin, mercury chloride or sodium hypochlorite, may be used. [1-5,7,8].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published, and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

Statement of Ethics

Verbal, photographic and informed consent was obtained from the patient described in this article.

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