

## Visual Treats in Dermatology

# Caught under the lens

Arunachalam Narayanan

Department of Dermatology and STD, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.



**\*Corresponding author:**

Arunachalam Narayanan,  
Department of Dermatology  
and STD, Jawaharlal Institute  
of Postgraduate Medical  
Education and Research,  
Puducherry, India.

[narayanan359@gmail.com](mailto:narayanan359@gmail.com)

Received : 14 March 2023

Accepted : 04 April 2023

Published : 14 April 2023

**DOI**

10.25259/CSDM\_67\_2023

**Videos available online at**

[https://doi.org/10.25259/  
CSDM\\_67\\_2023](https://doi.org/10.25259/CSDM_67_2023)

**Quick Response Code:**



A 12-year-old female patient presented with “dandruff” on her scalp [Figure 1] for the past 3 months. Trichoscopy (DL 200, ×10, non-polarized, non-contact) revealed an adult head louse moving among the hair on her scalp [Video 1]. Few oval-shaped nits of size around  $0.8 \times 0.3$  mm were also seen attached to the proximal part of the hair shaft. Microscopic examination (× 100) revealed a 2 mm, wingless, dorsoventrally flattened head louse with short antennae, and three pairs of clawed legs [Video 2]. Based on the characteristic trichoscopic and microscopic features, a diagnosis of pediculosis capitis was made and the patient was advised to apply 1% permethrin and wash it after 10 min. This was followed by wet combing. The same treatment was repeated after 1 week with good improvement. The household contacts were screened and treated in the same manner. Pediculosis capitis is transmitted among children through direct contact with an infected scalp. Other manifestations include papular urticaria, pruritus, excoriations, and lymphadenopathy. Head lice are known to carry *Staphylococcus aureus* and *Streptococcus pyogenes*. Other organism identified in head lice include *Borrelia recurrentis*, *Bartonella quintana*, and *Coxiella burnetti*.<sup>[1]</sup> Pediculosis capitis needs to be differentiated from peripilar keratin casts, scalp psoriasis, and seborrheic



**Figure 1:** A 12-year-old female patient presented with pediculosis capitis presenting as “dandruff” on her scalp.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2023 Published by Scientific Scholar on behalf of CosmoDerma



**Video 1:** An adult head louse moving among the hair on her scalp seen with a dermoscope (DL 200,  $\times 10$ , non-polarized, non-contact).



**Video 2:** Microscopic examination ( $\times 100$ ) revealed a 2 mm, wingless, dorsoventrally flattened head louse with short antennae, and three pairs of clawed legs.

dermatitis. Trichoscopy and microscopy are useful non-invasive investigations that help physicians establish the diagnosis in patients with pediculosis capitis.

Management of pediculosis capitis is based on the eradication of living lice and eggs. Topical treatments including permethrin 1% lotion/cream, malathion 0.5% lotion/gel, benzyl alcohol 5% lotion, spinosad 0.9% suspension, and ivermectin 0.5% lotion. If live lice are seen 24 h after the treatment, retreatment with a new drug class might be needed, as resistance is likely. Patients need to be made aware that conditioner should not be used before these topical medications and that hair should not be rewashed for 1–2 days after removing the medications. Along with these treatment options, heating clothing and linens to  $>50^{\circ}\text{C}$  is also recommended for better efficacy.

#### **Declaration of patient consent**

Patient's consent not required as patient's identity is not disclosed or compromised.

#### **Financial support and sponsorship**

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### **REFERENCE**

1. Coates SJ, Thomas C, Chosidow O, Engelman D, Chang AY. Ectoparasites: Pediculosis and tungiasis. *J Am Acad Dermatol* 2020;82:551-69.

**How to cite this article:** Narayanan A. Caught under the lens. *CosmoDerma* 2023;3:64.