Dermoscopy-Assisted Tick Extraction

A 25-year-old male presented with swelling and pain over the right postauricular area since one day. On examination, a tick was noted at the center of the lesion [Figure 1]. Dermoscopy (Firefly DE300. 20×. polarized mode) revealed pinkish-red area at the center of the lesion and confirmed the tick as nymphal form of Amblyomma [Figure 2a]. The tick was pulled upward using a sterilized tweezer applying a steady pressure under the guidance of dermoscope. Reevaluation of the lesion using dermoscope revealed a pale area with scaling at the point of attachment and no remnants from the tick [Figure 2b]. Dermoscopy of the retrieved tick revealed intact hypostome [Figure 2b]. The lesion subsided after 7 days of oral flucloxacillin with no further complaints during the 1month observation period.

Early diagnosis may reduce the morbidity and mortality of different tick-borne diseases.^[1] Oiso *et al.*^[1] and Matsuda *et al.*^[2] in two different case reports emphasized the use of dermoscope for the diagnosis



Figure 1: Clinical picture showing swelling and erythema over postauricular area with the tick at the center of the lesion

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

of a tick bite. Incomplete removal of the tick with the persistent presence of the hypostome in the skin can lead to infection or granuloma.^[1] Zalaudek *et al.*^[3] pointed out the use of dermoscope to confirm the complete removal of the tick. In view of the recent report of tick-borne disease like Lyme disease in Nepal in 2018 and multiple reports of the same disease in India recently,^[4,5] we would like to emphasize the use of dermoscope for the diagnosis, identificationof the type, and complete removal of the tick.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given

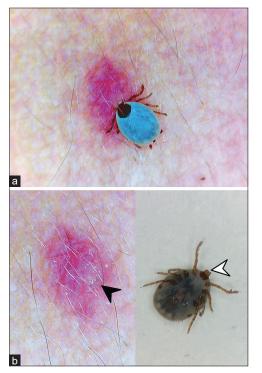


Figure 2: (a) Dermoscopy (Firefly DE300, ×20, polarized mode) showing pinkish-red area with the clearly visible tick having four pair of limbs. (b) Pale area with scaling at the point of attachment of the tick (black arrowhead) and intact hypostome of the retrieved tick (white arrowhead)

How to cite this article: Mathur M, Acharya P, Karki A. Dermoscopy-Assisted tick extraction. Indian Dermatol Online J 2020;4:682-3.

Received: 28-Nov-2018. Revised: 29-Dec-2018. Accepted: 05-Feb-2019. Published: 26-Sep-2019.

Mahesh Mathur, Prakash Acharya, Alina Karki

Department of Dermatology, College of Medical Sciences, Bharatpur, Nepal

Address for correspondence: Dr. Prakash Acharya, Department of Dermatology, College of Medical Sciences, Bharatpur, Chitwan, Nepal. E-mail: prakashacharya888@ gmail.com



his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Oiso N, Kawara S, Yano Y, Kawada A. Diagnostic effectiveness

of dermoscopy for tick bite. J Eur Acad Dermatol Venereol 2010;24:231-2.

- Matsuda M, Oiso N, Yano Y, Kawada A. Dermoscopy for tick bite: Reconfirmation of the usefulness for the initial diagnosis. Case Rep Dermatol 2011;3:94-7.
- Zalaudek I, Giacomel J, Cabo H, Di Stefani A, Ferrara G, Hofmann-Wellenhof R, *et al.* Entodermoscopy: A new tool for diagnosing skin infections and infestations. Dermatology 2008;216:14-23.
- Pun SB, Agrawal S, Jha S, Bhandari LN, Chalise BS, Mishra A, et al. First report of Lyme disease in Nepal. JMM Case Rep 2018;5:e005128.
- Jairath V, Sehrawat M, Jindal N, Jain VK, Aggarwal P. Lyme disease in Haryana, India. Indian J Dermatol Venereol Leprol 2014;80:320-3.