

Correspondence

Dermoscopy-assisted Radiofrequency-facilitated Extraction of a Live Tick

R. M. Kavya¹, Mohammed Salman Hyder¹, Keshavmurthy A. Adya¹, Arun C. Inamadar¹

¹Department of Dermatology, Venereology and Leprosy, Shri B. M. Patil Medical College Hospital and Research Centre, BLDE (Deemed to be University), Vijayapur, Karnataka, India.

*Corresponding author:

Arun C. Inamadar,
Department of Dermatology,
Venereology and Leprosy,
Shri B. M. Patil Medical
College Hospital and Research
Centre, BLDE (Deemed to
be University), Vijayapur,
Karnataka, India.

aruninamadar@gmail.com

To the editor,

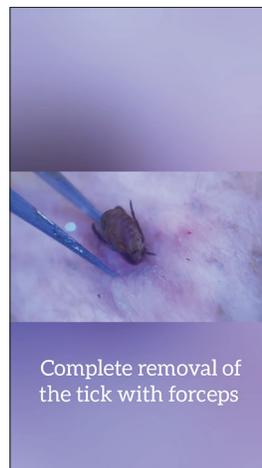
A middle-aged man presented with a painful skin lesion near the left axilla from the past 10 days. Examination revealed a tick embedded with its mouthparts inside the skin with surrounding erythema. Dermoscopy showed a live eight-legged tick with its body, legs and scutum visible outside and its mouthparts embedded deep inside [Video 1].

Ticks are well known vectors in the transmission of Lyme disease and rickettsial infections. Hence, recognition of tick infestation and their complete removal is important. Dermoscopy has been utilised to good effect in this regard. Dermoscopy not only visualises the tick *in vivo*

Received: 02 March 2023
Accepted: 17 March 2023
EPub Ahead of Print: 07 April 2023
Published: 28 September 2023

DOI
10.25259/IJPGD_30_2023

Quick Response Code:



Video 1: Videodermoscopy illustrating the role of dermoscopy in the diagnosis and management of tick infestation (Polarised dermoscopy [DermLite™ DL3, 3Gen Inc., San Juan Capistrano, CA, USA], ×10).

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 Indian Journal of Postgraduate Dermatology

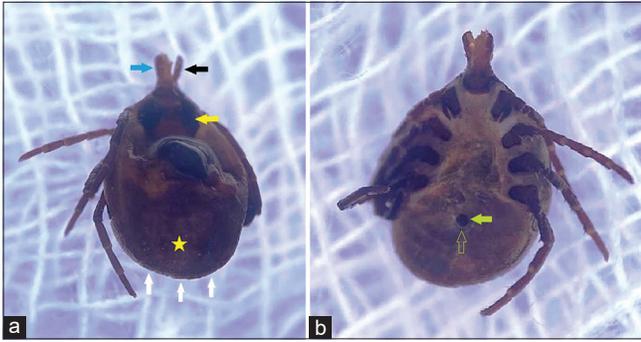


Figure 1: *Ex vivo* dermoscopy showing the dorsal (a) and ventral (b) aspects of the extracted tick. Note the palps (black arrow), hypostome (blue arrow), scutum (yellow arrow), body (yellow star) and festooning (white arrows) in the dorsal aspect. The ventral aspect shows the anus (green solid arrow) with anal groove (green hollow arrow) and four pairs of legs on either side (Polarised dermoscopy [DermLite™ DL3, 3Gen Inc., San Juan Capistrano, CA, USA], ×10).

and provides a magnified illuminated field during the procedure of its removal but it also helps in assessing the wound and *ex vivo* examination of the tick after its removal to confirm the adequacy of the procedure and morphological identification of the tick.^[1-3] [Video 1] illustrates the utility of dermoscopy in the diagnosis of tick infestation and its removal. We employed a low energy radiofrequency cautery to inactivate the tick.^[4] The mouth parts of the tick were then gently grasped with fine-tipped forceps and pulled out slowly without compression or twisting. On removal, the mouth parts (hypostome and palps) were clearly visible suggesting complete extraction [Figure 1]. The extracted tick showed morphological characters of *Dermacentor variabilis* (dog

tick).^[5] A dermoscopic examination of the wound did not show any remnants.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Mathur M, Acharya P, Karki A. Dermoscopy-assisted tick extraction. *Indian Dermatol Online J* 2019;11:682-3.
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.
3. Tick Bites. Available from: https://dermoscopedia.org/Tick_bites [Last accessed on 2023 Mar 02].
4. Ashique KT, Kaliyadan F. Radiofrequency device for tick removal. *J Am Acad Dermatol* 2015;72:e155-6.
5. *Dermacentor Variabilis*. Available from: https://www.animaldiversity.org/accounts/dermacentor_variabilis [Last accessed 2023 Mar 02].

How to cite this article: Kavya R, Hyder MS, Adya KA, Inamadar AC. Dermoscopy-assisted Radiofrequency-facilitated Extraction of a Live Tick. *Indian J Postgrad Dermatol* 2023;1:119-20.