



A case of dermatobia hominis diagnosed with dermoscope

Dermoskop ile tanı konulan dermatobia humanis olgusu

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To Editor,

Since the introduction of dermoscopy in dermatology, it has become increasingly easier to diagnose certain diseases. Entodermoscopy refers to the use of dermoscopy to facilitate the diagnosis of skin infections and infestations. Diseases that can be diagnosed using this method include viral warts, molluscum contagiosum, scabies, pediculosis, tinea nigra, tungiasis, and tick-borne infestations¹. In this report, we present a case of *Dermatobia hominis* larvae that can be easily diagnosed based on dermoscopic findings.

An eight-year-old girl was brought to the outpatient clinic because of black spots and draining swelling on her scalp (Figure 1). The lesions had appeared one week previously and caused itching and burning complaints. The patient's family reported that she had no known immunodeficiency or any other health problems. Apparently, the self-care of the patient and family was inadequate. Macroscopic examination revealed closed comedones in the vertex region of her scalp. Dermoscopic examination revealed perifollicular structures with crown-like spiny protrusions (Figure 2) (permission to use photographs was obtained from the patient). These spiny protrusions were suspected to belong to *D. hominis*

larvae, and liquid vaseline was applied to the lesion. The larvae, whose tails became prominent after local vaseline application, were removed with the help of pliers and sent to the laboratory for parasitological examination (Figure 3). Parasitological examination revealed the presence of *D. hominis* larvae. The patient was prescribed liquid vaseline for local dressing and topical mupirocin treatment, and regular follow-up visits were scheduled.

Although *D. hominis* is one of the most common causes of furuncular myiasis, it has not been frequently reported in Türkiye. The adult botfly lays its eggs under the bodies of mosquitoes and other blood-sucking insects, which transmit the eggs when they feed on cattle and humans. With body heat, the larvae hatch from the eggs and penetrate the skin². The introduction of dermoscopy into dermatology has facilitated the diagnosis of dermatologic diseases. Dermoscopy is frequently used to diagnose skin infections and infestations. The use of dermoscopy in this field is called "entodermoscopy"³.

Among the dermoscopic findings of *D. hominis*, a central opening containing a yellowish structure with intermittently emerging black barbed spines surrounded by dilated blood vessels has been described⁴. In some cases of infection and

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Figure 1. Black spots and draining swelling on the scalp



Figure 2. Crown-like spiny protrusions located on the body of the larva

infestation, it may be difficult to establish a definitive final diagnosis through dermatological examination. In our case, it was almost impossible to observe the larval tail with the naked eye. However, dermoscopic examination revealed the crown-like black protrusions of



Figure 3. D. Hominis larva

the larva, as reported in previously published articles, which led us to make the correct diagnosis.

Treatment options for infestations caused by *D. hominis* larvae include manual extraction and surgical excision. Other medical treatments are ineffective in these patients. The application of liquid petroleum jelly before manual extraction facilitates larval suffocation and movement out of the skin⁵. We applied liquid petroleum jelly to the areas identified by dermoscopy before extraction. When the tails became prominent, the larvae were removed using pliers.

Ethics

Informed Consent: The patient in this manuscript has given written informed consent to the publication of his case details.

Footnotes

Authorship Contributions

Surgical and Medical Practices: S.A., Ö.A., S.Ö., Concept: İ.C., S.A., Ö.A., S.Ö., Design: İ.C., S.A., Ö.A., S.Ö., Data Collection or Processing: İ.C., S.A., Ö.A., S.Ö., Analysis or Interpretation: İ.C., S.A., Ö.A., S.Ö., Literature Search: İ.C., S.A., Ö.A., S.Ö., Writing: İ.C., S.A., Ö.A., S.Ö.,

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