



DERMOSCOPY AND SKIN IMAGING

ALPIN FLEA: A STRANGE CASE OF ZONOSIS WITH A NEW DERMOSCOPIC PICTURE

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BACKGROUND: Tungiasis is a zoonotic parasitic disease caused by fleas of *Tunga*, endemic in equatorial and subtropical areas and rarely described in European Countries. The diagnosis is based on the clinic and the anamnestic data but the dermoscopic examination is a valid help.

OBSERVATION: We describe a 35-year-old Italian man who developed a subcutaneous nodule in the upper lateral region of right foot about few days after coming back from Ethiopia.

The lesion appeared as a keratotic nodule, with a black ring limit from the surrounding skin. We can dermoscopic observe a central hole supposed as terminal orifice of the flea's exoskeleton, a brown ring (posterior abdominal part), a sequence of concentric brown-yellow rings due to chitin storage, a white halo (parasite's distended abdomen), that present inner ovoidal white corpuscles (Flea's eggs), grey-blue irregular zones, that could represent ematine storage into the parasite's gut/intestinal bleeding or eggs. A new element, not yet in literature described, is the presence of white radial filaments, that spreads from the Cuticola to the anal orifice and that could represent the Flea's excretory System.

Tunga is classified as Arthropode. The body is divided into head, thorax and abdomen. Arthropods have generally a linear intestine divided into 3 parts: Stomodeo, Mesenteron and Proctodeo that presents at the end the anal opening. The excretory system consists of Malpighi's Tubules that open at the terminal part. We suggested that the white filaments in the pictures are Malpighi's tubules.

KEY MESSAGE: This case report allowed to evidence a new dermoscopic pattern: the white filaments with radial disposition, from the cuticola to the anal orifice that, considered the Flea's anatomy and morphology, we consider representative of the Malpighian tubules of the excretory system. This pattern could be insert among the dermoscopic criteria of characterization of tungiasis.

