

# TREATMENT OF ACRAL LICK DERMATITIS: CASE ANALYSIS AND LITERATURE REVIEW

NATÀLIA SOLÀ I COLL - JUNE 2024

## INTRODUCTION AND OBJECTIVE

Acral lick dermatitis (ALD) is a very common skin condition in dogs characterized by excessive licking of the limbs, primarily the carpus, metacarpus, and metatarsus.



Fig 1: Acral lesion on the forelimb

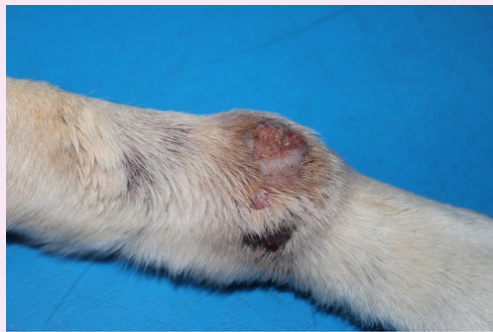


Fig 2: Acral lesion

This work is a literature review in which a series of cases from the Veterinary Clinical Hospital of the UAB will be analyzed and the treatment used in these cases will be compared with the literature. The objective is to analyze the therapeutic protocol and the results obtained with the recommendations of the scientific literature.

## ETIOPATOGENIA

Table 1: Etiopatogenia of ALD

Non-Psychogenic causes	Psychogenic causes	Perpetuating factors
Allergic dermatitis	Obsessive-compulsive disorders (OCD)	Secondary bacterial infections
Orthopaedic pain	Stereotypies	
Trauma	Separation anxiety	Endorphin release associated with compulsive licking
Foreign bodies in the skin	Boredom	
Fungal infections	Attention-seeking	Other factors: rupture hair follicles, contact of hairs with the lesion
Cutaneous neoplasms	Stressful situation	

## DIAGNOSIS AND TREATMENT

To diagnose it we can follow the standard protocol for any dermatological problem. First, a detailed clinical history is collected. Initial questions can help rule out primary causes such as atopic dermatitis, orthopaedic or neurological issues, and behavioural problems.

Before conducting more complex tests, a complete physical examination is performed, focusing on a dermatological examination with simple on-site tests like microscopic hair examination, cytology tests, Wood's lamp examination, and impression smears. Based on the initial results, more specific tests like biopsies, cultures, radiographs, and complete blood analyses can be conducted to identify the exact cause and determine the appropriate treatment.

To achieve effective treatment for acral lick dermatitis (ALD), three main pillars must be followed: treating the primary cause, breaking the licking cycle, and addressing secondary infections. Initially, physical measures should be implemented to stop the licking cycle, along with medication. Additionally, secondary infections must be treated.

Alternative therapies such as low-level laser therapy, radiation therapy, or acupuncture can also be considered. These therapies help manage symptoms and support healing, but identifying and addressing the underlying cause remains crucial to prevent recurrence.

## DISCUSSION AND CONCLUSION

Table 2: HCV reviewed cases with the treatments used

ANIMAL	TREATMENT
1	Amoxicillin with clavulanic acid 500mg 1 tablet VO every 12h Photobiomodulation with light energy (Phovia) on the right hind limb
2	Fusidic Acid 2% ointment + dimethyl sulfoxide every 12h Photobiomodulation with light energy (Phovia)
3	Fusidic Acid 2% ointment Photobiomodulation with light energy (Phovia)
4	Fusidic Acid 2% ointment + dimethyl sulfoxide Treatment prescribed by the traumatology service that is also used to treat ALD: Cephalosporin 22mg/Kg 14 days Robenacoxib 1mg/Kg 7 days Since there is no improvement: Gapiprant 60mg/24h
5	Photobiomodulation with light energy (Phovia)
6	Before the dermatology visit, treated with cephalosporin and improved. Upon stopping the treatment, the condition relapsed. After the dermatology visit: Cleanings with a shampoo containing chlorhexidine and miconazole (Malaseb) 3 times a week (only on the limbs) Deworming with sarolaner, moxidectin, and pyrantel. Cephalosporin 30 mg/Kg every 12h Oclacitinib 16 mg/kg every 12h
7	Fusidic Acid 2% ointment + dimethyl sulfoxide Clomipramine 80mg minimum 3 months
8	Cover the right carpus region to prevent self-trauma. Deworm monthly with an isoxazoline.
9	Oclacitinib 16mg Cephalosporin 500mg every 8h Deworm monthly with an isoxazoline.

This review concludes that while ALD is multifactorial, the therapeutic protocol is well-established. Identifying the primary cause is challenging, but once identified, the treatment is clear. In cases where conventional therapy is insufficient, alternative therapies have proven beneficial.