

# CUTANEOUS LEISHMANIASIS: A CASE REPORT OF A DIAGNOSTIC DILEMMA

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## Abstract

Cutaneous Leishmaniasis (CL) is the most prevalent clinical form of leishmaniasis. CL is difficult for the clinicians to diagnose because of the rarity of the disease and non-specific presentation. As CL is rare and given the limitation of available diagnostic modalities in a resource poor setting, diagnosis can be confusing.

## CUTANEOUS LEISHMANIASIS: A CASE REPORT OF A DIAGNOSTIC DILEMMA

**Key Words :** Cutaneous Leishmaniasis, Fine Needle Aspiration Cytology

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**Conflict of interest :** None

**Key clinical message:** Cutaneous Leishmaniasis (CL) is the most prevalent clinical form of leishmaniasis and is caused by vector borne protozoan parasite. Variation in diagnostic accuracy exists. A 54-year-old female farmer by occupation presented with lesion over right thigh for 8 months.

Lesion evolved over period of 2-3 months and progressed to form ulcer with surrounding redness. On examination, solitary plaque with crateriform ulcer 3\*2 cm in size roughly oval in shape was present. Ulcer floor was moist, smooth shiny with serous discharge and well defined raised erythematous margin was present. Biopsy was done which showed features suggestive of lupus vulgaris, for which Anti Tubercular Treatment (ATT) was started. There was persistence of ulcer despite 4 months of ATT, for which diagnosis was reconsidered and Fine Needle Aspiration Cytology (FNAC) was performed. FNAC showed numerous intra and extracellular amastigotes suggestive of Leishmaniasis which was treated with complete disappearance of ulcer over 4 months.

## Abstract

**Background :** Cutaneous Leishmaniasis (CL) is the most prevalent clinical form of leishmaniasis and is caused by vector borne protozoan parasite.<sup>1</sup> Variation in diagnostic accuracy exists between different

parasitological and histopathological examination.<sup>2</sup> Test of choice for diagnosis depends not only on the sensitivity and specificity of a test, but also the availability, especially in a resource poor setting. CL is difficult for the clinicians to diagnose because of the rarity of the disease and non-specific presentation. Here we report a rare case report of CL.

**Observation :** A 54-year-old female from Gorkha, farmer by occupation with frequent outdoor activities, presented with lesion over right thigh for 8 months. Initially single pinhead sized, soft, raised lesion with brownish red color was noted over right thigh that increased in size with crust formation. Lesion evolved over period of 2-3 months and progressed to form ulcer with surrounding redness. On examination, solitary plaque with crateriform ulcer 3\*2 cm in size roughly oval in shape was present over the right thigh, upper third aspect in the lateral part, approx.15cm from Anterior Superior Iliac Spine (ASIS). Ulcer floor was moist, smooth shiny with serous discharge and well defined raised erythematous margin was present. Biopsy was done which showed features suggestive of lupus vulgaris, for which Anti Tubercular Treatment (ATT) was started. There was persistence of ulcer despite 4 months of ATT, for which diagnosis was reconsidered and Fine Needle Aspiration Cytology (FNAC) was performed. FNAC showed numerous intra and extracellular amastigotes suggestive of Leishmaniasis which was treated with complete disappearance of ulcer over 4 months.

**Discussion :** As CL is rare and given the limitation of available diagnostic modalities in a resource poor setting, diagnosis can be confusing. Diagnosis can be made with good clinical acumen and FNAC in an endemic area.<sup>3</sup> With proper diagnosis overall prevalence of the disease can be estimated and clinical therapeutic trials can be performed with timely prevention of mucocutaneous complications.

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