



Swiss Tropical Institute  
Institut Tropical Suisse  
Schweizerisches Tropeninstitut

## Improving treatment of Cutaneous Leishmaniasis (CL) based on species differentiation

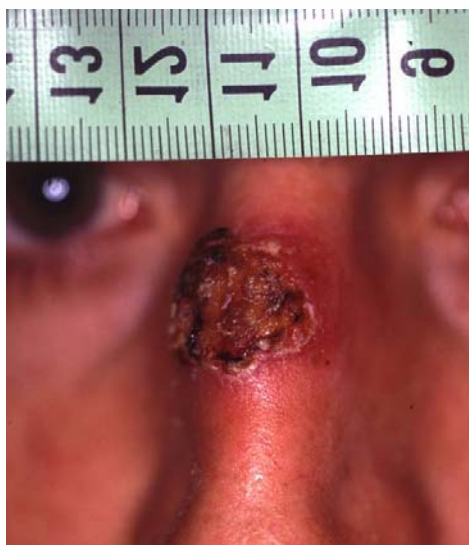
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### CL from French Guyana





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## 1. Background

- **Clinical management of leishmaniasis**
  - Based on data from endemic regions
  - Recommendations for Old and New World
- **Species determination routinely available**
  - Recommendations according to species proposed
    - Not evaluated in travelers
- **Genotyping Leishmania species**
  - Done in many centers
  - No evaluation/validation between the different methods



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## 2. Aims of collaborative project

- Multicenter observational study
  - leishmaniasis treatment protocols and outcomes
  - with respect to the infecting parasite species
- Comparison of all currently applied genotyping techniques
- Sequence information
  - all clinical cases
  - from reference strains.
- This aims at a joint data base including molecular and clinical data.

Standardized treatment protocols based on molecular species typing.



### 3. Specific objectives

- **3.1.** Generate a data base with clinical data including symptoms and description of the lesion(s)
- **3.2.** Identification of clinical aspects specific for different species
- **3.3.** Evaluation of the current treatment strategies
- **3.4.** Establish a multicenter collaboration for collecting information on treatment protocol, treatment outcome, genotyping information and for organizing exchange of material (DNA, blood or biopsy).



### 3. Specific objectives

- **3.5.** Identify the genotyping technique with the greatest discrimination power
- **3.6.** Identify the optimal molecular marker for species differentiation in *Leishmania*
- **3.7.** Validation and quality control of the locally applied technique at each collaborating center



## 4 Previous own work

- Treatment guidelines
  - Clinical aspect of lesion(s)
  - Species
- Genotyping
  - RFLP-based genotyping technique using mini-exon as molecular marker.
  - This technique has been used successfully in routine diagnostics for several years.



## 5. Procedures a. Diagnostics

- By Ingrid Felger



## 5. Procedures

### b. Clinical aspects

- a) Clinical examination
  - The clinical data (patient data, country of origin of the lesion, localization and description of the lesion etc) will be assessed in a questionnaire and documented
  - before and after treatment.
- b) Treatment
  - Each centre uses its own treatment schedules
  - Proposed treatment guidance based on the guidelines of the participating centers.
- c) Follow up
  - The patients will be followed at least until the healing of the lesion.
  - Follow up examinations according to the guidelines of each centre and at least one 1 year after healing



## 6. Funding

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