LeishMan: harmonising diagnostic and clinical management of leishmaniasis in Europe

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In 2012, an international group of experts from 12 institutions in seven European countries set up LeishMan (Leishmaniasis Management) [1], a project aiming to improve treatment of leishmaniasis on the basis of clinical presentation and molecular species differentiation.

The group of experts from currently 12 centres in Belgium, France, Germany, the Netherlands, Spain, Switzerland and the United Kingdom, aims to harmonise the diagnostic and clinical management of patients with cutaneous and mucosal leishmaniasis in Europe and has the following objectives:

- to conduct inter-laboratory comparisons and quality controls for diagnosis and parasite collection procedures;
- to establish and validate a consensus on molecular species typing;
- to address taxonomic problems in human-pathogenic species of the *Leishmania* genus;
- to implement permanent exchange between specialists and harmonise treatment recommendations in Europe;
- to collect accurate information on the treatment of cutaneous and mucosal leishmaniasis in Europe.

As different genotyping methods are in use in the various laboratories, a comparative analysis is required to assess whether they produce congruent results. To this end, a comparison of all currently applied species typing techniques is performed on the basis of a well-defined strain reference set. Development of standardised molecular tools is a further goal.

Sequence information from various parasite genome targets will be systematically collected from all clinical cases, and the outcome will be linked to the clinical parameters for final analysis of treatment success. Clusters of genotypes will be analysed with respect to clinical presentation and treatment outcome.

With the ongoing revision of the taxonomy of the genus *Leishmania* and after discussing difficulties in discriminating closely related species or species hybrids, the participants have agreed to form a working group with the aim to address these shortcomings.

A multicentre, multinational surveillance has started analysing leishmaniasis treatment protocols and treatment outcomes with respect to the infecting parasite genotype or species. All patients with parasitologically confirmed cutaneous or mucosal leishmaniasis are included in the participating centres. The clinical data (patient data, country where the lesion was acquired, localisation and description of the lesion, etc.) are assessed in a questionnaire and documented before and after treatment. Each physician applies their routine treatment schedules. However, suggestions for treatment guidance will be offered to all physicians. Patients will be followed at least until the lesion has healed. Follow-up examinations will be done according to the current guidelines.

References