

## **Cutaneous Leishmaniasis Biopsy Procedures**

### **1. Criteria for biopsy**

- Any patient who has had a non-healing lesion (does not have to be an open ulcer) for greater than 3 to 4 weeks needs to be suspected of having leishmaniasis.
- For OCONUS, please consult with your local dermatologists or LDL clinical consultant ([usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil](mailto:usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil)) before performing the biopsy.

### **2. Biopsy procedure**

- An area of the lesion needs to be cleaned thoroughly with betadine, then washed off carefully and dried; all betadine must be removed prior to acquisition of the samples.
- The anticipated area of biopsy should be anesthetized with 1% lidocaine by infiltration.
- A 3-4 mm sterile disposable punch or sterile scalpel (#15, #11, or #10) should be used to remove a piece of tissue approximately 3 to 4 mm in circumference and approximately 1mm deep from the edge of the lesion. Lesions on the face, anterior of the neck, and near larger vessels and/or nerves needs to be biopsied with extreme caution and a simple surface scraping may be preferred to a biopsy.
- A small portion of the tissue biopsy should then be placed in a small amount of alcohol (just enough to cover the specimen) in a leakproof vial (such as a “nunc” transport tube) for *Leishmania* PCR.
- Another portion of tissue biopsy (3mm punch) may be used for touch prep (slides) or submitted in 10% formalin for histologic analysis.
- Biopsy can be also placed in PBS, RPMI or LDL provided media for culture.

### **3. Submission of slides and/or biopsies.**

The biopsy smears and vials with tissue in alcohol for *Leishmania* PCR or in media for culture should be sent directly to the WRAIR *Leishmania* Diagnostic Laboratory (LDL).

*Leishmania* Diagnostics Laboratory  
Diagnostics and Countermeasures Branch, Walter Reed Army Institute of Research  
503 Robert Grant Avenue, Silver Spring, MD 20910  
Phone (240) 595-7353 – Fax (301) 319-9997

- Label the specimen tube with the patient ID and seal with waterproof tape. If slides from multiple lesion sites are submitted, a designation as to which anatomic site such as A, B etc.
- Wrap the tube in absorbent packing material.
- Place the specimen tube in secondary packaging.
- Place the secondary package in the outer packaging (i.e., the shipping container).
- Include the test request form (CONUS or OCONUS) with patient's name, age, brief clinical history, and travel history; specimen collection date; and test(s) requested.
- Label the shipping container "Clinical Specimen" on the outside of the package.
- Include the following information: submitter's name, address, phone number, fax number, and e-mail address.
- Ship at room temperature by overnight carrier.

**4. Forwarding of samples.**

Specimens and copies of the Leishmaniasis Test Request should be shipped via Express courier to the address below. The container should be labeled as Category B diagnostic specimens. POC is:

- Laboratory Director, LDL at COM: 240-595-7353 (24 hour Emergency Number); Office: 301-319-2297; Cell: 240-406-6510; email: [usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil](mailto:usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil)
- Alternate POC: Associate Laboratory Director, LDL at cell: 301-661-2667, Office: 301-319-3512; email: [usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil](mailto:usarmy.detrick.medcom-wrair.mbx.leishmania-diagnostic@mail.mil)

**SHIPPING ADDRESS:**

Leishmania Diagnostics Laboratory  
Diagnostics and Countermeasures Branch  
Walter Reed Army Institute of Research  
ATTN: Leishmania Diagnostics Laboratory (LDL)  
9100 Brookville Road, Building 508, Silver Spring, MD 20910