

An increase in the release of $^{14}\text{CO}_2$ was observed in liver homogenate and medium incubated with *M. avium*.

A similar result was noted with homogenate incubated with a combination of *M. avium* and *M. leprae*. By contrast, the addition of *M. leprae* to the liver homogenate or *M. leprae* incubated in medium alone did not significantly alter $^{14}\text{CO}_2$ production. It was interesting to note a reduction in the amount of $^{14}\text{CO}_2$ released in the suspensions of liver homogenate containing *M. avium*, hypothetically, from substrate competition or inhibition by tissue components. Since significant amounts of $^{14}\text{CO}_2$ were released when *M. leprae* were inoculated in the presence of ^{14}C -palmitate, we may conclude that the bacilli were metabolically active.

The outcome of this study is consistent with our previous observation on the apparent inability of *M. leprae* to utilize exogenous ^{14}C -acetate. We have already emphasized the importance of obtaining armadillo-derived *M. leprae* free from contamination by other mycobacteria. By exploiting the failure of *M. leprae* to actively metabolize ^{14}C -acetate under these experimental conditions, we present a possible method for rapidly distinguishing *M. leprae* from this potential mycobacterial contaminant.

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A Plea for Routine Use of Fine-Needle Aspiration Cytology in the Diagnosis and Follow Up of Leprosy

TO THE EDITOR:

We have previously described diagnostic fine-needle aspiration cytology in nodular lepromatous leprosy (1) and subsequently in leprosy lesions through the Ridley-Jopling (R-J) spectrum (2). The techniques we used to obtain material for cytological study were: a) fine-needle aspiration cytology using a 10-ml syringe attached to a 23-gauge needle and b) cytopuncture, performed without negative pressure (2). These procedures were performed by a pathologist.

Cytologic evaluation of leprosy patients is being tried on a larger scale in our insti-

tution. The procedures are now being performed by dermatologists at the time of initial examination of the patient. The simplicity and rapidity of the technique, the abundance of cytologic material obtained, the amount of information generated enabling classification in the R-J scale by reading May-Grunwald-Giemsa in conjunction with Ziehl-Neelsen-stained smears has enthused our clinical colleagues. In addition, the absence of trauma and scarring are appreciated by the patient, and reports can be issued in a few hours.

Cytology is an established tool in the diagnostic workup of a large number of in-

inflammatory and neoplastic conditions. Most pathologists are familiar with the techniques and are comfortable with reading cytology smears. We propose that cytology be advocated as a routine tool in the evaluation of leprosy patients because it can even be implemented in the field setting. We feel that as experience with the cytology of leprosy accumulates the accuracy of reporting improves to a level comparable to histopathology in most cases.

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