## **ABSTRACT**

Reactivation in Hansen's Disease has been reported since the dapsone era but after the introduction of MDT, with a prompt and effective cure, reactivation become an important research topic for control programs.

Aiming to analyze the histological pattern of reactivation, the histological evolution of Hansen's Disease was studied in 179 biopsies of 66 individuals presenting reactivation during or after treatment. Such biopsies were examined in the Instituto Lauro de Souza Lima between 1987 and 1994.

Relapse occurred in 10 individuals not treated with MDT and was solely detected by the bacillary index. The intensity of the reactivation episode seems to be related to the cell immune resistance of the individual and depends on the amount of accumulated antigen.

The analysis of the biopsies in this study confirms the difficulty in to differentiate activity, reaction and relapse and the correct allocation of these cases in the spectrum of the disease. It was not possible to distinguish between relapse and acute reactivation (type 1 reaction) in histological and clinical terms. This fact lead to the conclusion that reactivations are bacillary proliferation due to drug resistance or multiplication of persisting *M. Leprae*.