

Histological Analysis of the Mitsuda Reaction in Contacts of Multibacillary Leprosy Patients

TO THE EDITOR:

Despite recent advances in the immunology of leprosy, the well known Mitsuda reaction can still provide important information in the interpretation of different immunological behaviors related to this disease. In a recent paper we evaluated clinical and histological responses to the Mitsuda antigen in 40 contacts of multibacillary (MB) patients, 23 non-consanguineous and 17 consanguineous contacts. Eight contacts presented both clinically and histologically negative responses, 6 consanguineous and 2 non-consanguineous. The histological analysis in 3 consanguineous contacts revealed only the presence of nonspecific focal inflammatory infiltrate with lymphohistiocytes within the dermis but no acid-fast bacilli (AFB). The other 3 consanguineous contacts showed histiocytic responses either as sparse nonepithelioid macrophage cells amid the collagen or as a histiocytic aggre-

gate, micronodular, nontuberculoid structure. Out of the 6 consanguineous contacts, 3 presented AFB. The 2 non-consanguineous contacts showed only a nonspecific, focal lymphohistiocytic reaction pattern with no AFB (⁵).

In a bibliographic review of papers dealing with the histological patterns of Mitsuda reactions in healthy persons, we found that authors refer to only two histological patterns: namely, a negative one of the nonspecific type with no AFB and a pattern of chronic, granulomatous tuberculoid reaction generally presenting no AFB (^{3,*}). The pattern of the sparse histiocytic reaction or

* Dillon, N. L., *et al.* Lavantamento dermatológico de escolares. In: Resultados dos trabalhos executados no Campus Avancados de Humaltá (AM) em 1976. Botucatu: UNESP, pp. 42-98, 1978 (report not published).

miconodular nontuberculoid granuloma showing AFB was only mentioned in papers studying the Mitsuda reaction in MB cases (1, 2, 4).

We found in the biopsies of the Mitsuda reactions of the consanguineous contacts of MB cases a nontuberculoid histiocytic infiltrate with AFB. Comparing these observations with the findings in the literature cited above, the following question can be raised: Could this histological pattern in these contacts indicate a subclinical infection?

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REFERENCES

1. ARRUDA, M. S. P., ARRUDA, O. S., FLEURY, R. N., GARCIA, D. O., OPROMOLLA, D. V. A. and URA, S. Estudo da imunidade celular em pacientes branqueados. *Med. Cut. Iber. Lat. Amer.* **10** (1982) 231–238.
2. BECHELLI, L. M., RATH DE SOUZA, P. and QUAGLIATO, R. Correlação entre os resultados da leitura clínica e do exame histopatológico da reação de Mitsuda. *Rev. Bras. Lepr.* **27** (1959) 172–182.
3. PETRI, V. and BEIGUELMAN, B. Histology of the Mitsuda reaction of healthy adults with no known contacts with leprosy patients. *Int. J. Lepr.* **53** (1985) 540–545.
4. THOMAS, J., JOSEPH, M., RAMANUJAM, L., CHACKO, C. J. G. and JOB, C. K. The histology of the Mitsuda reaction and its significance. *Lepr. Rev.* **51** (1980) 329–339.
5. TRINDADE, M. A. B. *Reação de Mitsuda em contatos consanguíneos e não consanguíneos de doentes de hanseníase com formas bacilíferas*, thesis. Escola Paulista de Medicina, São Paulo, Brazil, 1987.