

A INDUCTION OF THE LATE HIPERSENSITIVITY REACTION TO DNCB IN PATIENTS WITH DIFFERENT CLINICAL FORMS OF HANSENIASIS IN BRAZIL

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ABSTRACT - One hundred and twenty Brazilian patients with several forms of hanseniasis were tested with DNCB. The results were the following: 1) the sensitization of patients with hanseniasis to DNCB was lower than that seen in the general population; 2) the sensitization of the borderline and virchowian forms of hanseniasis were lower than that seen in the indeterminate and tuberculoid forms.

Key words: Hanseniasis. therapeutics. DNCB. Sensitization.

It is settled that 95% of normal persons have the capacity to be sensitized to DNCB which means that normal persons have a high degree of cell-mediated hipersensitivity.

On the other hand, there are diseases such as hanseniasis which are characterized by a decrease of cell-mediated hipersensitivity. As a matter of fact, the hanseniasis polar concept of Rabello, F.E.A. shows that in one pole (virchowian pole) there is a decrease of cell-mediated hipersensitivity, while in other pole (tuberculoid pole) the cell-mediated hipersensitivity is present. Near to the virchowian pole there are the borderline hanseniasis patients.

The aim of this work was to find out the possible alterations of the capacity of induction of the late hipersensitivity to DNCB

in the different forms of hanseniasis in Brazilian patients.

1-METHODOLOGY

After making antiseptis of the skin with alcohol, a metal plate with two holes of 1 cm diameter was placed on the forearm. In one hole was dropped a solution of 2% DNCB in acetone and in the other hole, a lower concentration of DNCB (0,5%) was used. After the volatilization of the acetone, the tested area was covered with gauze during 24 hours. The reading of the reactions was made 14-16 days later and was considered positive if there were erythema and induration. If both tests were negative, a new test of recall with the solution of 0,05% DNCB was made and it was read 48 hours after.

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TABLE .Results of the DNCB tests in the several clinical forms of Hanseniasis.

Clinical form and Control Group	DNCB	
	Negative	Positive
V	13 (26%)	37 (74%)
B	6 (33%)	12 (67%)
I	3 (14%)	21 (86%)
T	1(11%)	25 (89%)
Control group	1 (5%)	19 (95%)

The positive reactions were classified as the following:

- erythema and induration with both solutions;
- erythema and induration exclusively with the 2% solution;
- erythema and induration exclusively after reexposure to the 0,05% solution.

One hundred and twenty patients of the several clinical forms of Hanseniasis (50 VH, 18 BH, 24 IH and 28TH) were tested.

2 . RESULTS

The results are shown in table and are summarized as follows:

2.1 - The induction of late hypersensitivity to DNCB was lower in patients with Hanseniasis (79%) than in the normal population (95%).

2.2 - The sensitization of the borderline (67%) and virchowian Hanseniasis (74%) was lower than that observed in the indeterminate

(86%) and tuberculoid Hanseniasis (89%).

3 - DISCUSSION

Waldorf, D.S. *et al.*⁵ demonstrate that the sensitization to DNCB occurred in 50% of patients with virchowian and borderline Hanseniasis and inactivate virchowian Hanseniasis, while, in the control group, it occurred in 94% and in 96% of the patients with mycosis fungoides. Indeed, in the patients with VH with erythema nodosum, the sensitization with DNCB occurred only in 23,5%.

Katz, S.I. *et al.*² studied seven cases of Hanseniasis and showed that all the four cases of VH were negative to sensitization to DNCB, while in three cases of TH, only one was positive. Besides, there was a good correlation with MI F.

Convit J. *et al.*¹ did not find a decrease of the late sensitization by the use of PPD, trichophytin, candidin and DNCB tests.

Mendes, E. *et al*³ demonstrate a very significant decrease Of the late immunity to DNCB and intadermic tests in cases of virahowian hanseniasis, while these tests were nomal in the cases of tuberculoid hanseniasis.

Our results agree with majority of the authors.

4 - CONCLUSION

The capacity of sensitization to DNCB in hanseniasis was lower than the normal population and the lowest response was among patients with borderline and virchowian hanseniasis.

RESUMO - Cento e vinte pacientes brasileiros com várias formas de hanseníase foram testados com DNCB. Os resultados foram os seguintes: 1) a sensibilização de pacientes com hanseníase ao DNCB era mais baixa do que a observada na população em geral; 2) a sensibilização das formas "borderline" e virchowiana de hanseníase era mais baixa do que a observada nas formas indeterminada e tuberculóide.

Palavras chave: Hanseníase. Terapêutica. DNCB. Sensibilização.

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