

NATURAL ANTITOXIN IN BLOOD OF LEPROSY
PATIENTS IN PUERTO RICO ✓

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The experimental use of diphtheria antitoxin and diphtheria toxoid in the treatment of leprosy (1) implies that in leprosy natural antitoxin is deficient or lacking. Since the disease is most prevalent in tropical and subtropical countries this would mean that leprosy patients differ from the general population in this respect. For it has been demonstrated repeatedly that antitoxic immunity to diphtheria is more prevalent and is gained earlier in life in these countries than in temperate climates (2, 3).

Specific information regarding leprosy patients however is lacking. In August, 1941, through the courtesy of Dr. Guillermo Arbona, Attending Physician to the Insular Leprocomio at Trujillo Alto, Puerto Rico, and with the consent of the patients to whom the matter was explained, one of us (J. A. D.) obtained blood from 22 patients in various stages of the disease. The plasma was separated, sealed in glass ampules and sent to Cleveland for titration. The technic used was Fraser's modification of the Römer method (4).

The following results were obtained:

Units of antitoxin per cc.	No. of patients
Less than 0.002	1
From 0.002 to 0.01	0
From 0.01 to 0.1	2
From 0.1 to 1.0	14
More than 1.0	5
Total	22

From these results it would appear that leprosy patients in Puerto Rico have, as a rule, substantial quantities of diphtheria antitoxin in their blood.

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