

BODY OF REPORT

SEATO Medic Study No. 31 Specificity of ID and CF antigens in test with homologous and heterologous antisera.

Project No. 3A 025601 A 811 Military Medical Research Program
S. E. Asia

Task 01: Military Medical Research Program
S. E. Asia

Subtask 01: Military Medical Research Program
SEASIA (Thailand)

Reporting Installation: US Army-SEATO Medical Research Laboratory
APO San Francisco 96346

Division of Medical Research Laboratories

Department of Medical Zoology

Period Covered by Report: 1 April 1964 to 31 March 1965

Principal Investigator: Major Dale E. Wykoff, MSC

Associate Investigator: Dr. Muneo Yokogawa *

Assistant Investigator: Miss Kobkul Ariyaprakai

Reports Control Symbol: MEDDH-288

Security Classification: UNCLASSIFIED

Objective: The purpose of this investigation is to test individual reaction to certain antigens, both by intradermal and complement-fixing techniques.

Description: The following antigens have been used for intradermal testing: Paragonimus westermani (veronal buffered saline extract); P. westermani (polypeptide fraction); Clonorchis sinensis; and Schistosoma japonicum. Those persons having positive reactions to either Paragonimus antigen were further tested

* School of Medicine, Chiba, Japan

for infection by sputum examination and chest X-ray. Sera were drawn from all persons who were skin tested and sent to Prof. Yokogawa for test by complement fixation.

Progress: A total of 389 persons have been tested with each of the four antigens (1556 observations). The VBS extract of P. westermani showed a total of 43 positives while the polypeptide fraction was positive in only one case. The S. japonicum antigen gave a positive intradermal reaction in 31 of 239 cases (13%) and an additional 10 cases (4%) were doubtful. The Clonorchis antigen gave remarkably uniform reactions (no positive; only two doubtful out of 239 cases). The results are presented in Table I.

All persons given sputum examinations and chest X-rays were negative for demonstrable paragonimiasis. The results of the complement fixation tests have not yet been received from Japan.

Summary and Conclusion: The value of further intradermal testing will depend on the CF test results. It appears that considerable cross reactivity is causing false positive results. If the CF tests prove accurate, testing is indicated in areas of schistosomiasis and paragonimiasis (see SEATO Medic Studies 33 and 30, respectively).

TRIALS OF SKIN TEST ANTIGENS IN
PHITSANULOKE, THAILAND

Antigen	No. person	Pos. React.		Doubt. React.		Neg. React.	
		No.	Percent	No.	Percent	No.	Percent
<i>P. westermani</i> reg							
Both sexes	239	21	8.78	7	2.9	211	88.3
Males	113	19	7.94	5	2.1	89	37.2
Females	126	2	0.84	2	0.84	122	51.1
<i>S. japonicum</i>							
Both sexes	239	31	12.9	10	4.2	198	82.9
Males	113	24	10.0	6	2.5	83	34.7
Females	126	7	2.9	4	1.7	115	48.2
<i>C. sinensis</i>							
Both sexes	239	-	-	2	0.8	237	99.2
Males	113	-	-	2	0.8	111	46.5
Females	126	-	-	-	-	126	52.7
<i>P. westermani</i> polypep.							
Both sexes	239	-	-	1	0.4	238	99.6
Males	113	-	-	1	0.4	112	46.9
Females	126	-	-	-	-	126	52.7
TOTAL TESTED	239	33	13.8	12	5	194	81.2
Total males	113	24	10.1	7	2.9	82	34.3
Total females	126	9	3.7	5	2.1	112	46.9

UDORN

<i>P. westermani</i> reg.							
Both sexes	125	22	17.5	9	7.2	94	75.3
Males	92	18	19.5	8	8.6	66	71.9
Females	33	4	12.1	1	3	28	84.9
<i>P. westermani</i> polypep.							
Both sexes	125	1	0.8	-	-	124	99.2
Males	92	1	1.08	-	-	91	98.9
Females	33	1	-	-	-	33	100

Sputum specimens were examined and chest X-rays were made on each person having a \pm or + Paragonimus skin test reaction. All sputum specimens were negative for Paragonimus ova. All chest X-rays were free of suspicious shadows.