

ANNUAL PROGRESS REPORT

SEATO Medic Study No. 26                      Studies on Opisthorchis viverrini in Thailand -  
Clinical Manifestations of Opisthorchiasis

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 146, San Francisco, California.

    Division of Medical Research Laboratories

    Department of Medical Zoology

Period Covered by Report:                              1 April 1963 to 31 March 1964

Principal Investigator:                              Major Dale E. Wykoff, MSC

Associate Investigators:                              Dr Prasert Setasubun\*  
    Dr Chamlong Harinasuta\*  
    Dr Kasem Jittayasothorn\*\*

Assistant Investigator:                              Mr. Keturat Sukavat

Reports Control Symbol:                              MEDDH-288

Security Classification:                              UNCLASSIFIED

\* Bangkok School of Tropical Medicine.

\*\* Provincial Hospital, Udorn.

ABSTRACT

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Reports Control Symbol:                   MEDDH-233

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The object of this study is to detect and to describe the clinical and biochemical changes associated with infection by O. viverrini in humans. This project has been established in the Udorn Provincial Hospital, 400 miles north-east of Bangkok, where almost 90% of the residents harbor this parasite. Following a thorough physical examination, a series of liver-function tests have been carried out on some 700 persons. The resulting data are being recorded on IBM cards for analysis when approximately one thousand persons have been completely studied.

\* Bangkok School of Tropical Medicine  
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## BODY OF REPORT

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Objective: This study was designed to determine whether or not there are specific clinical symptoms and biochemical-test changes associated with infection by O. viverrini.

Description: No study has been previously made to determine the clinical aspects of infection with O. viverrini. Some general discomforts such as malaise and anorexia have been reported but neither from the clinical nor the biochemical standpoint has anything pathognomonic been described. The study was established in the Udorn Provincial Hospital, some 400 miles northeast of Bangkok, where almost 90% of the residents are infected. Following a thorough physical examination, data are gathered on the following: age, sex, occupation, address, result of stool examination (if positive for liver flukes, the number of eggs per gram feces); in- or out-patient status; observations on icterus, edema, anemia; the frequency (in five categories) of eating twelve types of food such as raw fish, crabs, etc; observations on the frequency of dizziness, nausea, diarrhea, dysentery, epigastric pain, etc; ethnic background (Thai, Thai-Lao, Thai-Chinese, Thai-Burmese, etc); height, weight, pulse, adenopathy

and lung-heart findings; notations on hepato- and splenomegaly. A complete blood count is carried out along with the following liver function tests: total protein, albumin, globulin, A/G ratio, cephalin flocculation, sedimentation rate, hemoglobin, hematocrit, bilirubin (one and 30 minutes), cholesterol and esters, thymol and **zinc** turbidity, alkaline phosphatase, SGOT and SGPT.

Progress: Nearly 700 persons have been completely studied and the data prepared for transcription to IBM cards. Analysis will be made after approximately 1000 persons have been examined.

Summary: A well-advanced study is underway to evaluate physical and biochemical changes associated with infection by O. viverrini. The resulting data have not yet been analyzed.

Conclusion: It is anticipated that this study will be terminated in late 1964 at which time all the resulting data will be examined and correlated by IBM processes.