

BODY OF REPORT

SEATO Medic Study No. 33 Studies on schistosomiasis in Thailand.

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 November 1964 to 31 March 1965

Principal Investigator: Major Dale E. Wykoff, MSC

Associate Investigator: Prof. Paul C. Beaver *

Assistant Investigators: MSG Max M. Winn
Miss Kobkul Ariyaprakai

Reports Control Symbol: MEDDH-288

Security Classification: UNCLASSIFIED

Objective: The purpose of this investigation is to study schistosomiasis in Thailand.

Description and Progress: The first case of schistosomiasis in Thailand was reported by Chaiyaporn, et. al. in 1959. The patient resided in a small rural village in Chawang District of Jangwad Nakornsrihamaraj, southern Thailand. In 1962, Harinasuta and Kruatrachue reported the examination of 2667 individuals by

* Department of Tropical Medicine, Tulane Univ. Sch. of Medicine

intradermal test, using antigen prepared from adult S. japonicum. Of these 289 gave a positive or doubtful reaction. Of the 289 rectal biopsies were made on 187 (of which 50 were found to have eggs in rectal tissue). All 289 were examined by stool examination and three were found to be passing eggs. The snail hosts were not recognized. The present investigation was undertaken when Police Major Phinit Sandhyananda, M.D. referred to Major Wykoff a section removed from a growth on the neck of a woman residing in Phitsanuloke (north) Thailand. The section contained schistosome-like ova and was sent to Prof. Paul C. Beaver (Tulane University) for confirmation. He agreed that it contained "Schistosoma japonicum-like" ova. This was unusual both because of the geographical area (the woman had been a resident of northern Thailand her entire life) and because it was found in a growth on her neck. Further studies in the area revealed the presence of Schistosomes in rats. These appeared similar to Schistosoma-incognitum (=S. suis) but further studies are required. Two other persons in Phitsanuloke are believed to be passing ova, but extremely irregularly. Another human case was recognized after death, the patient having come from Roy-Ed in northeastern Thailand. The eggs were recognized in a section of a mass removed from the patient's neck. Initial studies indicate that the ova from the neck and back growths of the two widely separated patients are probably not the same as the ova being passed by the rat schistosome in these areas.

Summary and Conclusions: It is possible that schistosomiasis is more widespread in Thailand than previously believed. Further investigations are required to determine the prevalence of infection and to determine the species of schistosome infecting both man and rats.