

## SEATO MEDICAL RESEARCH STUDY ON ENTEROVIRUS INFECTIONS

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Period of Report 1 April 1965 - 31 March 1966

### OBJECTIVE:

To determine the etiology of diseases caused by enteroviruses in Thailand.

### DESCRIPTION:

Specific diagnosis of suspected enterovirus disease cases admitted to Childrens Hospital was attempted by virus isolation and serology.

### PROGRESS

A large number of cases of a febrile illness diagnosed clinically as herpangina were seen at Childrens Hospital both as inpatients and in the OPD. during August and September 1965. Twenty-two cases were studied virologically. Cases were selected by the pediatric staff of Childrens Hospital on the basis of fever and vesicular lesions in the pharynx resembling those of typical herpangina. Two cases also had vesicles on the palms and soles (so called "hand, foot, and mouth disease")

Throat and rectal swabs and acute and convalescent sera were collected. Virus isolation was done in suckling mice and primary monkey kidney tissue culture. Serologic studies included arbovirus HI tests and neutralization or complement fixation tests against homologous viruses.

TABLE 1. Virus Isolation from Herpangina Cases.

<u>CASE No.</u>	<u>Suckling mice</u>		<u>MK tissue culture</u>		<u>Virus IDENTIFICATION</u>
	<u>TS</u>	<u>RS</u>	<u>TS</u>	<u>RS</u>	
325	+	+	0	0	Coxsackie A-8
327	0	0	+	0	Adenovirus
331	+	+	0	0	Coxsackie A-4
332	+	0	0	0	Coxsackie A
333	0	0	0	+	Unidentified
334	+	0	0	0	Coxsackie A
336	+	+	0	0	" "
340	0	0	+	+	Adenovirus
695	0	0	0	+	" "
2020	+	+	0	0	Coxsackie A

Of the twenty-two cases originally included in the study, two were found to have chikungunya infections and one had evidence of a recent dengue infection by HI test. No agents were isolated from the throat or rectal swabs of these three patients. Viruses were isolated results are summarized in table 1. Two Coxsackie-A strains were typed by the 406 Medical Laboratory, the remaining Coxsackie-A strains were merely identified by typical histopathologic lesions in suckling mice. The adenovirus isolates are untyped but hemagglutination tests with monkey and rat erythrocytes indicate that at least two different types were isolated. The unidentified agent is ether resistant, produces CPE in monkey kidney cells and is not neutralized by antisera to polioviruses types 1-3, Coxsackie B types 1-6 or Echo types 1-28.

SUMMARY:

A group of 22 cases clinically diagnosed as herpangina were studied. Coxsackie A viruses were found to be the most common etiology. Disease due to adenoviruses, chikungunya virus and an unidentified enterovirus was also diagnosed as herpangina.