

4. Title: "Lipid Studies in Arcus Senilis"

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Objective

The purpose of this study is to determine if a correlation exists between arcus senilis of the cornea and the serum cholesterol level. In the U.S., the presence of arcus senilis is frequently accompanied by an elevated serum cholesterol, and since this eye finding is said to be common in Thailand, it will be important to discover if a similar association exists here.

Progress

A total of 106 people were examined for arcus senilis at the Bhumipol Air Force Hospital by Col. Lert Viriyapanich. Of this number, 37 were found to have arcus senilis (27 males, 10 females). The remaining 69 acted as controls (54 males, 15 females). The serum cholesterol of values are as follows:

Patient with Arcus Senilis							
<u>Male</u>							
Age	10-19	20-29	30-39	40-49	50-59	60-69	70-79
No. of Persons	0	7	0	6	5	4	5
Range	—	157-307	—	154-226	136-222	179-235	144-182
Mean	—	202	—	193	185	205	168
<u>Female</u>							
No. of persons	0	1	2	0	1	3	3
Range	—	204	144-206	—	180	192-239	146-187
Mean	—	204	175	—	180	222	169
<u>Control Patients</u>							
<u>Male</u>							
No. of persons	7	26	12	2	5	2	0
Range	137-224	117-287	141-286	190-213	136-218	136-218	—
Mean	170	186	188	202	171	197	—
<u>Female</u>							
No. of persons	2	4	5	2	1	1	0
Range	150-194	146-206	132-250	243-258	205	211	—
Mean	172	171	196	251	205	211	—

Discussion

The number of values in most of the age groups is too small to be properly evaluated. At this time, it would appear that no correlation exists between the presence of arcus senilis and the level of serum cholesterol as it does in the U.S. The range of cholesterol values is quite similar to that found in the U.S. However, during the 1960 ICNND survey, the average cholesterol from many areas around Thailand was only 132 mg. The reason for this difference may be due to the more rural selection of patients in 1960

This study is now terminated because of greater emphasis on infectious disease problems.