**The Statistical Review of Pathologically Proved
Cases of Myocardial Infarction, Sclerosis of
A. coronaria, Aorta, A. basilaris and
A. renalis**

*This survey was made by the members of Committee on the Coronary Circulation
(Chairman : Prof. S. Okinaka)*

The members of Committee who participated in this survey were :—

Tokyo Area : Assistant Prof. S. Ōtsu, Pathological department, Tokyo University

Kyoto Area : Prof. K. Suzue, Pathological department, Kyoto University

Fukuoka Area : Assistant Prof. N. Kimura, Misao's Clinic, Kyushu University

The chief in charge of this survey was by Assist. Prof. S. Ōtsu.

1. Statistics based on the autopsy records.

Kyushu Univ. : 10232 Cases from May 1904 to 1953

Kyoto Univ. : 7158 Cases from 1901 to 1955

Tokyo Univ. : 2746 Cases from 1945 to 1955

(1) Sclerosis of aorta, A. coronaria & A. basilaris

A) Reports of the Kyushu University

- 1) Aortic sclerosis (Table 1)
- 2) Coronary sclerosis (Table 2)
- 3) Basilar sclerosis (Table 3)
- 4) Aortic sclerosis & coronary sclerosis (Table 4)
- 5) Aortic sclerosis & basilar sclerosis (Table 5)
- 6) Coronary sclerosis & basilar sclerosis (Table 6)
- 7) Sclerosis of Aorta, A. coronaria, & A. basilaris (Table 7)

B) Reports of the Kyoto University

- 1) Coronary sclerosis (Table 8)
- 2) Sclerosis of Aorta, A. coronaria & A. basilaris (Table 9)

(2) Myocardial infarction (including great scar) based on the autopsy records.

- 1) Annual incidence
 - a) Report of the Kyoto University (Table 10)
 - b) Report of the Tokyo University (Table 11)
- 2) Sex and age
 - a) Report of the Kyoto University (Table 12)
 - b) Report of the Tokyo University (Table 13)

2. Statistics based on the macroscopic research of preserving organs.

This study was performed at the Kyushu University (853 Cases) and the Tokyo University.
(539 Cases from Jan. 1954 to Jun. 1955)

- 1) Coronary sclerosis
 - a) Report of the Kyushu University (Table 14)
 - b) Report of the Tokyo University (Table 15)
- 2) Aortic sclerosis (Tokyo University) (Table 16)
- 3) Basilar sclerosis (Tokyo University) (Table 17)

- 4) Renal sclerosis (Tokyo University) (Table 18)
- 5) Relationship between the grade of atherosclerosis of A. coronaria and that of aorta
 - a) male (Table 19)
 - (Kyushu University)
 - b) female (Table 20)
 - a') male (Table 21)
 - (Tokyo University)
 - b') female (Table 22)
- 6) Relationship between the grade of atherosclerosis of A. coronaria and that of A. basilaris
 - a) male (Table 23)
 - (Kyushu University)
 - b) female (Table 24)
 - a') male (Table 25)
 - (Tokyo University)
 - b') female (Table 26)
- 7) Relationship between the grade of atherosclerosis of A. coronaria and that of A. renalis
 - a) male (Table 27)
 - (Tokyo University)
 - b) female (Table 28)
- 8) Comparison of the grade of sclerosis between the left and the right coronary arteries
 - a) Report of the Kyushu University (Table 29)
 - b) Report of the Tokyo University (Table 30)
- 9) The predominance of the left or the right coronary artery according to the Schlesinger's classification (Tokyo University) (Table 31)

SUMMARY

1. Coronary sclerosis first appears in the second decade (Kyushu University) or in the third decade (Tokyo University) and then increases in frequency and intensity with age.
2. Coronary sclerosis appears in younger age group than those in whom aortic sclerosis appears (Kyushu University) or both of them appear in about the same age groups (Tokyo University). There is no significant difference in their frequencies. (Tokyo University).
3. Incidences of basilar and renal sclerosis are less frequent than that of coronary and aortic sclerosis and the first appearance of the former is always far behind the latter.
4. All types of sclerosis, coronary, aortic, basilar and renal, seem to be more frequent and much severe in males than in females.
5. Severe coronary sclerosis usually accompanies extensive arteriosclerosis of other arteries such as aorta, basilar artery and renal artery.
One of the important factors which cause coronary sclerosis seems to be the same factor which causes the arteriosclerosis in many other organs in the whole body.
6. It seems that the factors from the cardiac wall (cardiac muscle) also influence the incidence of coronary sclerosis. These factors are the compression to coronary arteries, the increase of the peripheral resistance in coronary circulation, etc.
7. Although there are a few discrepancies between the report from Tokyo University and that from Kyushu University because of different standard of judging for the grade of arteriosclerosis, they are so small that there are no different conclusions.
8. The frequency of myocardial infarction in Kyoto area was much less than that in Tokyo area; and the frequency of coronary sclerosis in Kyoto was also less than that in Tokyo area and Kyushu area.

TABLE I. INCIDENCE OF AORTIC SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male			Female		
	Total No. of Cases	Aortic Sclerosis		Total No. of Cases	Aortic Sclerosis	
		No. of Cases	%		No. of Cases	%
0—9	868	18	2.0	714	13	1.8
10—19	400	51	12.7	305	62	15.7
20—29	1,124	300	26.5	731	209	28.5
30—39	961	369	38.4	599	217	36.2
40—49	959	524	54.8	441	231	52.3
50—59	817	604	74.3	305	216	70.9
60—69	374	323	86.3	132	108	81.9
70—89	111	104	93.8	63	62	98.5
Total	5,614	2,293		3,380	1,118	

TABLE II. INCIDENCE OF CORONARY SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male			Female		
	Total No. of Cases	Coronary Sclerosis		Total No. of Cases	Coronary Sclerosis	
		No. of Cases	%		No. of Cases	%
0—9	205	2	0.9	157	1	0.6
10—19	130	7	5.4	117	3	2.5
20—29	402	28	7.0	233	21	9.0
30—39	342	91	26.6	193	23	11.9
40—49	356	142	39.8	154	45	29.2
50—59	292	158	54.1	110	59	53.6
60—69	153	107	69.9	62	35	56.4
70—89	63	51	80.9	37	28	75.6
Total	1,943	586		1,063	215	

TABLE III. INCIDENCE OF BASILAR SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male			Female		
	Total No. of Cases	Basilar Sclerosis		Total No. of Cases	Basilar Sclerosis	
		No. of Cases	%		No. of Cases	%
0—9	65	0	0	67	0	0
10—19	46	1	2.1	55	0	0
20—29	187	2	1.0	124	0	0
30—39	167	11	6.5	83	2	2.4
40—49	171	20	11.7	66	13	19.7
50—59	140	55	39.2	61	23	37.7
60—69	86	53	61.2	43	26	60.5
70—89	43	38	88.5	27	23	85.2
Total	905	180		526	87	

TABLE IV. AORTIC SCLEROSIS & CORONARY SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male								Female							
	Aort. Scl. +				Aort. Scl. -				Aort. Scl. +				Aort. Scl. -			
	Cor. Scl. +		Cor. Scl. -		Cor. Scl. +		Cor. Scl. -		Cor. Scl. +		Cor. Scl. -		Cor. Scl. +		Cor. Scl. -	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	of		of		of		of		of		of		of		of	
0—9	1	50.0	1	50.0	0	0	188	100.0	0	0	4	100.0	1	0.7	142	99.2
10—19	2	22.2	7	77.7	5	0.4	112	99.5	2	22.1	7	77.8	1	0.9	102	99.0
20—29	15	20.5	58	79.4	7	0.2	300	99.7	10	17.5	47	82.4	8	4.4	170	95.5
30—39	59	53.4	52	46.5	27	8.9	178	91.0	13	24.5	40	75.4	9	6.8	124	93.1
40—49	102	59.3	72	40.6	23	20.7	126	79.2	36	40.4	53	59.5	9	14.0	55	85.9
50—59	136	63.3	79	36.6	16	25.4	47	74.5	53	63.9	30	37.0	4	16.6	20	83.3
60—69	92	73.5	33	26.4	5	26.2	14	73.7	33	62.3	20	37.6	0	0	7	100.0
70—89	47	81.0	11	18.9	1	25.0	3	75.0	31	79.5	8	20.4	0	0	0	0
Total	454		313		94		968		178		209		32		620	

TABLE V. AORTIC SCLEROSIS & BASILAR SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male								Female							
	Aort. Scl. +				Aort. Scl. -				Aort. Scl. +				Aort. Scl. -			
	Bas. Scl. +		Bas. Scl. -		Bas. Scl. +		Bas. Scl. -		Bas. Scl. +		Bas. Scl. -		Bas. Scl. +		Bas. Scl. -	
	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%
0—9	0	0	1	100.0	0	2.4	40	100.0	0	0	0	0	0	0	49	100.0
10—19	0	0	2	100.0	1	0.8	40	97.5	0	0	9	100.0	0	0	37	100.0
20—29	2	4.2	46	95.8	1	1.9	122	99.1	0	0	26	100.0	0	0	84	100.0
30—39	7	14.9	40	85.1	2	5.7	99	98.0	2	8.0	23	92.0	0	0	53	100.0
40—49	15	19.9	61	80.1	4	6.2	66	94.3	11	29.7	26	70.3	0	0	20	100.0
50—59	47	54.8	41	45.2	2	6.2	30	93.8	18	51.5	17	48.5	2	16.7	10	83.3
60—69	36	61.0	23	39.0	2	33.3	4	66.6	21	60.0	14	40.0	1	25.0	3	75.0
70—89	30	83.5	6	16.5	0	0	0	0	21	87.6	3	12.4	0	0	0	0
Total	137		220		12		401		73		118		3		256	

TABLE VI. CORONARY SCLEROSIS & BASILAR SCLEROSIS (KYUSHU UNIVERSITY)

Age Group	Male								Female							
	Cor. Scl. +				Cor. Scl. -				Cor. Scl. +				Cor. Scl. -			
	Ba. Scl. +		Ba. Scl. -		Ba. Scl. +		Ba. Scl. -		Ba. Scl. +		Ba. Scl. -		Ba. Scl. +		Ba. Scl. -	
	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%
0—9	0	0	0	0	0	0	40	100.0	0	0	1	100.0	0	0	26	100.0
10—19	0	0	1	100.0	0	0	30	100.0	0	0	3	100.0	0	0	36	100.0
20—29	0	0	7	100.0	2	1.9	100	98.0	0	0	8	100.0	0	0	73	100.0
30—39	7	19.4	29	80.5	0	0	81	100.0	1	20.0	4	80.0	1	1.9	50	98.0
40—49	10	22.1	35	77.8	5	7.7	60	92.2	5	53.3	10	66.6	3	15.0	17	85.0
50—59	35	66.0	18	33.9	6	14.6	35	85.3	16	59.3	11	40.6	0	0	3	100.0
60—69	27	62.9	16	37.0	6	46.1	7	53.8	16	80.0	4	20.0	4	56.2	3	43.7
70—89	23	62.2	14	37.7	3	75.0	1	25.0	15	93.8	1	6.1	3	75.0	1	25.0
Total	102		108		22		254		53		42		11		214	

TABLE VII. SCLEROSIS OF THE AORTA, A. CORONARIA & A. BASILARIS (KYUSHU UNIVERSITY)

		Sex		Male								Female							
Sclerosis	A	+	+	+	+	—	—	—	—	Total	+	+	+	+	—	—	—	—	Total
	C	+	+	—	—	+	+	—	—		+	+	—	—	+	+	—	—	
	B	+	—	+	—	+	—	+	—		+	—	+	—	+	—	+	—	
Age Group																			
0—9		0	0	0	0	0	0	0	36	36	0	0	0	0	0	0	0	27	27
10—19		0	0	0	1	0	1	0	29	31	0	3	0	2	0	0	0	33	38
20—29		0	7	0	20	0	0	0	84	111	0	4	0	14	0	2	0	61	81
30—39		7	17	0	16	0	10	0	64	114	1	2	0	12	0	1	0	37	53
40—49		0	27	3	15	0	5	3	45	107	5	10	3	7	0	0	0	8	33
50—59		34	16	7	17	0	3	0	16	93	16	8	0	4	0	1	0	5	34
60—69		28	13	3	5	2	2	0	1	54	15	4	4	3	0	0	0	1	27
70—79		18	3	3	1	1	0	0	0	26	9	1	2	1	0	0	0	0	13
80—89		4	1	0	0	0	0	0	0	5	6	0	1	0	0	0	0	0	0
Total		100	84	16	75	3	21	3	275	577	52	32	10	43	0	4	0	172	313

A; Aorta.

C; A. coronaria.

B; A. basilaris

TABLE VIII. FREQUENCY AND GRADE OF CORONARY SCLEROSIS (AGE AND SEX) (KYOTO UNIVERSITY)

Age	Male				Female			
	+	++	+++	Total(%)	+	++	+++	Total(%)
0—20	0	0	0	0 (0)	0	0	0	0 (0)
21—30	2	1	0	3 (0.37)	0	0	0	0 (0)
31—40	3	2	0	5 (0.74)	2	0	0	2 (0.38)
41—50	25	12	4	40 (6.36)	4	4	0	8 (1.71)
51—60	24	9	5	38 (6.54)	5	1	0	6 (2.09)
61—70	22	7	8	37 (18.7)	3	1	1	5 (2.77)
71—	9	2	4	15 (26.3)	2	1	1	4 (6.45)
Total	85	33	21	139 (3.40)	16	7	2	25 (0.81)

Note:

- Degree of coronary sclerosis
 - + thickening of the wall or crooked vessel
 - ++ atheromatous degeneration
 - +++ calcification
- Degree of aortic sclerosis
 - + thickening of the wall
 - ++ atheromatous degeneration
 - +++ calcification
 - ulcer
- Degree of basilar sclerosis
 - + thickening of the wall
 - ++ atheromatous degeneration and calcification
 - +++ hemorrhage

TABLE XI. RELATIONSHIP BETWEEN THE GRADE OF CORONARY SCLEROSIS AND SCLEROSIS OF THE AORTA AND A. BASILARIS (KYOTO UNIVERSITY)

Degree of Coronary Sclerosis	Aorta					A. basilaris		
	+	++	+++	Total		+	++	+++
	53	15	17	12	97	14	2	0
	4	18	11	4	37	0	2	1
	3	3	6	11	23	6	5	0
Total	60	36	34	27	157			

TABLE X. FREQUENCY OF MYOCARDIAL INFARCTION AND SCAR (KYOTO UNIVERSITY)

	Myocardial Infarction	Myocardial Scar
from 1901 to 1906	0	2
from 1907 to 1915	0	1
from 1916 to 1926	4	1
from 1927 to 1934	4	7
from 1935 to 1944	3	2
from 1945	2	12
Total	13	25

TABLE XI. (TOKYO UNIVERSITY)

	Total Number of Autopsy Cases	Myocardial Infarction (great scar)		Brain Hemorrhage and Softening		Nephrosclerosis	
		No. of Cases	%	No. of Cases	%	No. of Cases	%
1945	80	0	0	0	0	0	0
1946	145	0	0	0	0	1	0.69
1947	191	0	0	0	0	2	1.05
1948	216	0	0	2	0.93	1	0.47
1949	243	1	0.41	1	0.41	5	2.06
1950	304	1	0.33	2	0.66	1	0.33
1951	332	3	0.9	2	0.6	1	0.3
1952	318	5	1.57	4	1.26	10	3.14
1953	378	5	1.32	8	2.12	7	1.85
1954	539	8	1.58	7	1.29	17	3.15
1955							
Total	2,746	23	0.84	26	0.95	45	1.60

TABLE XII. FREQUENCY OF MYOCARDIAL INFARCTION AND SCAR (AGE AND SEX) (KYOTO UNIVERSITY)

Age	Male		Female		Total Number of Autopsy Cases	Total Number of Myocardial Infarction (%)	Myocardial Scar		Total Number of Myocardial Scar (%)
	No. of Autopsy Cases	Myocardial Infarction (%)	No. of Autopsy Cases	Myocardial Infarction (%)			Male	Female	
0—20	1148	0 (0)	913	0 (0)	2061	0	0 (0)	0 (0)	0
21—30	805	0 (0)	641	0 (0)	1446	0	0 (0)	0 (0)	0
31—40	669	2 (0.30)	521	0 (0)	1190	0.17	2 (0.30)	0 (0)	0.17
41—50	629	3 (0.48)	467	0 (0)	1096	0.27	6 (0.96)	1 (0.21)	0.64
51—60	581	2 (0.34)	287	0 (0)	868	0.23	6 (1.02)	1 (0.34)	0.69
61—70	198	4 (2.02)	180	1 (0.56)	378	1.32	6 (0.30)	1 (0.56)	1.85
71—	57	0 (0)	62	1 (1.62)	119	0.83	2 (3.50)	0 (0)	1.66
Total	4087	11 (0.27)	3071	2 (0.06)	7158	0.18	22 (0.53)	3 (0.09)	0.34

TABLE XIII. FREQUENCY OF MYOCARDIAL INFARCTION, CEREBRAL HEMORRHAGE, CEREBRAL SOFTENING, NEPHROSCLEROSIS IN AGE AND SEX (TOKYO UNIVERSITY)

Sex Diagnosis Age		Male								Female											
		Total No. of Cases		Myocardial Infarction		Cerebral Hemorrhage		Cerebral Softening		Nephro-sclerosis		Total No. of Ccses		Myocardial Infarction		Cerebral Hemorrhage		Cerebral Softening		Nephro-sclerosis	
No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%	No. of Cases	%		
0—19	420	0	0	0	0	0	0	0	0	318	0	0	0	0	0	0	0	0	0		
20—29	174	0	0	0	0	0	0	2	1.15	143	0	0	0	0	0	0	0	0	0		
30—39	203	0	0	0	0	0	0	4	1.97	130	1	0.77	0	0	0	0	0	1	0.77		
40—49	257	2	0.77	3	1.17	0	0	8	3.11	155	0	0	2	1.29	0	0	6	3.87			
50—59	346	6	1.73	4	1.16	0	0	6	1.73	145	2	1.31	2	1.38	0	0	2	1.38			
60—69	224	9	4.01	3	1.34	5	2.23	10	4.46	80	0	0	8	0	0	1	1.25	2	2.5		
Above 70	82	2	2.43	3	3.54	2	2.43	2	2.43	32	1	03.3	0	0	1	3.13	2	6.25			
Total	1706	19	1.11	13	0.76	7	0.41	32	1.88	1003	4	0.39	4	0.39	2	0.19	13	1.29			

TABLE XIV. INCIDENCE OF CORONARY SCLEROSIS IN AGE AND SEX (KYUSHU UNIVERSITY)

Age	Sex	Grade of Cor. Scl.	Total No. of Cases	Male								Total No. of Cases	Female								
				—		+		++		+++			—		+		++		+++		
					%		%		%		%			%		%		%		%	
0—9			62	62	100	0	0	0	0	0	0	38	38	100	0	0	0	0	0	0	0
10—19			31	18	58.1	11	35.5	2	6.5	0	0	34	24	67.6	9	29.4	1	2.9	0	0	0
20—29			92	27	29.3	56	60.9	9	9.8	0	0	60	31	51.7	26	43.3	3	5.0	0	0	0
30—39			95	13	13.7	61	64.2	20	21.1	1	1.1	60	19	31.7	35	58.3	6	10.0	0	0	0
40—49			100	9	9.0	71	71.0	17	17.0	3	3.0	49	8	16.3	32	65.3	8	16.3	1	2.0	2.0
50—59			95	5	5.3	51	53.7	34	35.8	5	5.3	39	4	10.3	26	66.7	8	20.5	1	2.6	2.6
60—			71	0	0	20	28.2	41	57.7	10	14.1	27	0	0	16	59.3	9	33.3	2	7.4	7.4
Total			546	134	24.5	270	49.5	123	22.5	19	3.5	307	124	40.4	144	46.9	35	11.4	4	1.3	1.3

TABLE XV. INCIDENCE OF CORONARY SCLEROSIS IN AGE AND SEX (TOKYO UNIVERSITY)

Age	Grade of Cor. Scl.	Sex	Male						Female											
			Total No. of Cases		I	II	+	++	≡	Total No. of Cases		I	II	+	++	≡				
			No. of Cas.	%						No. of Cas.	%						No. of Cas.	%	No. of Cas.	%
0—9			67	67	100	0	0	0	0	0	53	53	100	0	0	0	0	0	0	0
10—19			24	24	100	0	0	0	0	0	10	10	100	0	0	0	0	0	0	0
20—29			25	18	72.00	0	0	0	0	0	20	13	65.00	7	35.00	0	0	0	0	0
30—39			31	11	35.48	10	32.26	9	29.03	1	3.23	21	6	28.57	12	57.14	1	4.76	2	9.52
40—49			53	8	15.09	26	49.06	17	32.08	2	3.77	24	6	25.00	11	45.84	5	20.84	1	4.18
50—59			55	3	5.45	19	34.53	26	47.27	6	10.91	33	2	6.07	15	45.45	13	39.39	2	6.07
60—69			57	1	1.75	9	15.79	23	40.35	15	26.32	10	0	0	4	40.00	4	40.00	2	20.00
70—			21	0	0	1	4.76	10	47.62	8	38.10	6	0	0	1	16.67	3	50.00	1	16.67
Total			333	132	39.64	72	21.59	85	25.82	32	9.61	177	90	50.86	50	28.25	26	14.69	8	4.52

TABLE XVI. AORTIC SCLEROSIS IN AGE AND SEX (TOKYO UNIVERSITY)

Sex	Male										Female																													
	Total No. of Cases		—		+		++		+++		Total No. of Cases		—		+		++		+++																					
	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%																				
Age	Grad eof Aort. Scl.	Total No. of Cases	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%																				
																					0—9	65	98.48	1	1.52	0	0	0	0	0	0	55	55	100	0	0	0	0	0	
																					10—19	24	100	0	0	0	0	0	0	0	0	10	8	80.00	1	10.00	1	10.00	0	0
																					20—29	27	85.18	2	7.40	2	7.40	0	0	0	19	13	68.42	5	26.31	1	5.26	0	0	
																					30—39	31	35.80	9	29.03	10	32.25	0	0	0	22	11	50.00	6	27.27	3	13.63	2	9.09	
																					40—49	52	6	11.54	19	36.53	19	36.53	8	15.38	0	24	4	16.66	9	37.50	8	33.33	1	4.16
																					50—59	54	4	7.43	8	14.86	32	59.44	8	14.86	0	35	5	14.28	4	11.42	21	60.00	3	8.57
																					60—69	57	0	0	2	3.50	18	31.58	22	38.59	15	26.31	10	0	1	10.00	5	50.00	3	30.00
																					70—	21	0	0	0	0	8	38.09	9	42.85	4	19.04	6	0	0	0	1	16.66	2	33.33
																					Total	332	133	40.06	41	12.35	89	26.51	47	14.16	22	6.62	181	96	53.04	26	14.38	40	22.10	11

TABLE XVII. BASILAR SCLEROSIS IN AGE AND SEX (TOKYO UNIVERSITY)

Age Grade of Basil. Scl.		Sex																			
		Male					Female														
		Total No. of Cases		-		+		±		≡		Total No. of Cases		-		+		±		≡	
		No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%	No. of Cas.	%
0-9		57	57	100	0	0	0	0	0	0	0	45	100	0	0	0	0	0	0	0	0
10-19		23	23	100	0	0	0	0	0	0	0	5	100	0	0	0	0	0	0	0	0
20-29		23	23	100	0	0	0	0	0	0	0	14	13	92.85	1	7.15	0	0	0	0	0
30-39		24	22	91.67	1	4.17	1	4.17	0	0	0	21	19	90.48	2	9.5	0	0	0	0	0
40-49		42	28	66.67	10	23.81	4	9.52	0	0	0	17	14	82.85	2	11.76	0	0	1	5.89	0
50-59		45	35	77.78	7	15.11	7	15.11	1	2.00	1	28	19	67.86	5	21.05	4	11.09	0	0	0
60-69		36	14	38.88	6	16.66	7	19.44	4	11.11	5	8	3	37.50	3	37.50	2	25.00	0	0	0
70-		13	2	15.38	1	7.69	7	53.84	1	7.69	2	5	0	0	0	0	2	40.00	0	0	0
Total		263	204	77.57	25	9.51	20	7.50	6	2.28	8	143	118	82.52	13	9.09	8	5.59	3	2.10	1

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TABLE XVIII. RENAL SCLEROSIS IN AGE AND SEX (TOKYO UNIVERSITY)

Age		Grade of Renal Scl.		Sex																		
				Male					Female													
				Total No. of Cases		-	+	±	No. of Cas.		%	Total No. of Cases		-	+	±	No. of Cas.		%			
				No. of Cas.		%	No. of Cas.		%	No. of Cas.		%	No. of Cas.		%	No. of Cas.		%	No. of Cas.		%	
0-9		69		69	100	0	0	0	0	0	0	54	100	0	0	0	54	100	0	0	0	
10-19		24		24	100	0	0	0	0	0	0	10	100	0	0	0	10	100	0	0	0	
20-29		27		26	96.30	0	0	0	0	0	0	20	100	0	0	0	20	100	0	0	0	
30-39		31		21	67.74	6	19.35	4	12.90	0	0	22	21	95.45	1	4.55	0	21	95.45	0	0	0
40-49		53		41	77.36	4	7.55	7	13.21	1	1.89	25	20	80.00	1	4.00	2	20	80.00	2	8.00	0
50-59		54		39	72.22	7	12.96	6	11.11	1	1.85	34	28	82.35	2	5.88	3	28	82.35	1	2.94	0
60-69		56		20	35.71	10	17.86	18	32.14	8	14.29	10	2	20.00	2	30.00	4	2	20.00	1	10.00	0
70-		19		6	31.58	4	21.05	9	47.37	0	0	5	1	20.00	2	40.00	0	1	20.00	2	40.00	0
Total		333		246	73.87	31	9.31	45	13.51	10	3.00	180	156	86.67	9	5.00	9	156	86.67	6	3.33	0

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TABLE XIX. RELATIONSHIP BETWEEN ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF AORTA IN MALE (KYUSHU UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis											
		—			+			++			+++		
		No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%
0—9	57	57	0	0	0	0	0	0	0	0	0	0	0
10—19	30	18	0	0	10	1	10.0	2	2	100	0	0	0
20—29	84	24	6	25.0	53	11	20.8	7	2	28.6	0	0	0
30—39	91	12	5	41.7	58	18	31.0	20	11	55.0	1	1	100
40—49	95	7	2	28.6	69	29	42.0	16	6	37.5	4	3	66.7
50—59	91	5	2	40.0	48	33	68.8	34	28	82.4	9	4	100
60—	65	0	0	0	18	16	88.9	38	32	84.2	0	9	100

TABLE XX. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND OF AORTA IN FEMALE (KYUSHU UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (290)											
		—			+			++			+++		
		No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%
0—9	38	38	1	2.6	0	0	0	0	0	0	0	0	0
10—19	32	22	2	9.1	9	1	11.1	1	0	0	0	0	0
20—29	55	29	4	13.8	24	8	33.3	2	1	50.0	0	0	0
30—39	75	17	7	41.2	34	12	35.3	6	4	66.7	0	0	0
40—49	44	7	2	28.6	29	14	48.3	7	4	55.6	1	1	100
50—59	37	4	4	100	24	18	75.0	8	5	62.5	1	1	100
60—	27	0	0	0	16	13	81.3	9	0	0	2	2	100

TABLE XXI. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF AORTA IN MALE (TOKYO UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (327 Cases, Aortic Sclerosis 197, 60.24%)														
		—			±			+			++			+++		
		No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Sclero.	%	No. of Cases	Aortic Scl.	%
0—9	66	66	1	1.51	0	0	0	0	0	0	0	0	0	0	0	0
10—19	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20—29	25	18	2	11.11	7	2	28.71	0	0	0	0	0	0	0	0	0
30—39	30	10	5	50.0	10	6	60.0	9	8	88.88	1	1	100	0	0	0
40—49	51	6	4	66.66	26	22	84.61	17	17	100	2	2	100	0	0	0
50—59	54	3	2	66.66	19	17	89.47	25	24	96	6	6	100	1	1	100
60—69	56	1	1	100	9	9	100	22	22	100	15	15	100	9	9	100
70—	21	0	0	0	1	1	100	10	10	100	8	8	100	2	2	100
Total	327	128	15	11.72	72	57	79.16	83	81	97.59	32	32	100	12	12	100

TABLE XXII. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF AORTA IN FEMALE (TOKYO UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (175 Cases, Aortic Sclerosis 83, 47.43%)														
		—			±			+			++			+++		
		No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%	No. of Cases	Aortic Scl.	%
0—9	53	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10—19	10	10	2	20	0	0	0	0	0	0	0	0	0	0	0	0
20—29	19	12	3	25	7	3	42.85	0	0	0	0	0	0	0	0	0
30—39	21	6	1	16.66	12	7	58.35	1	0	0	2	2	100	0	0	100
40—49	23	5	4	80.00	11	10	90.90	5	4	80	1	1	100	1	1	100
50—59	33	2	0	0	15	13	86.66	13	13	100	2	2	100	1	1	100
60—69	10	0	0	0	4	4	100	4	4	100	2	2	100	0	0	0
70—	6	0	0	0	1	1	100	3	3	100	1	1	100	1	1	100
Total	175	88	10	11.36	50	38	76	26	24	92.30	8	8	100	3	3	100

TABLE XXIII. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF A. BASILARIS IN MALE (KYUSHU UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (166)											
		—			+			++			+++		
		No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%
0—9	13	13	0	0	0	0	0	0	0	0	0	0	0
10—19	7	2	0	0	4	0	0	1	0	0	0	0	0
20—29	25	7	0	0	14	0	0	4	0	0	0	0	0
30—39	30	2	0	0	22	0	0	5	1	20.0	1	1	100
40—49	34	3	0	0	25	1	4.0	4	0	0	2	2	100
50—59	26	2	0	0	13	2	15.4	8	3	37.5	3	3	100
60—	31	0	0	0	9	4	44.4	17	6	35.2	5	4	80

TABLE XXIV. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF AORTA IN FEMALE

Age	Total No. of Cases	Coronary Sclerosis (89)											
		—			+			++			+++		
		No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%
0—9	11	11	0	0	0	0	0	0	0	0	0	0	0
10—19	9	7	0	0	2	0	0	0	0	0	0	0	0
20—29	22	9	0	0	12	0	0	1	0	0	0	0	0
30—39	17	5	0	0	10	1	10.0	2	0	0	0	0	0
40—49	11	2	0	0	5	1	20.0	4	1	25.0	0	0	0
50—59	10	2	1	50.0	6	1	16.7	1	0	0	1	1	100
60—	9	0	0	0	5	3	60.0	3	2	66.7	1	1	100

TABLE XXV. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF A. BASILARIS IN MALE (TOKYO UNIVERSITY.)

Age	Total No. of Cases	Coronary Sclerosis (256 Cases, Basilar Sclerosis, 59, 23.05%)														
		—			±			+			++			+++		
		No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%
0—9	55	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10—19	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20—29	22	16	0	0	6	0	0	0	0	0	0	0	0	0	0	0
30—39	23	7	0	0	7	0	0	9	2	22.22	0	0	0	0	0	0
40—49	40	5	1	20	12	3	14.28	12	8	66.66	2	2	100	0	0	0
50—59	44	2	1	50	18	3	16.66	19	4	21.05	4	1	25	1	1	100
60—69	36	0	0	0	5	0	0	14	8	57.14	9	7	77.77	8	7	87.50
70—	13	0	0	0	1	0	0	6	5	83.33	5	5	100	1	1	100
Total	256	108	2	1.85	58	6	10.34	60	27	45	20	15	75	10	9	90

TABLE XXVI. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF A. BASILARIS IN FEMALE (TOKYO UNIVERSITY.)

Age	Total No. of Cases	Coronary Sclerosis (138 Cases; Basilar Sclerosis 25, 18.12%)														
		—			±			+			++			+++		
		No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%	No. of Cases	Scl. of A. basil.	%
0—9	44	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10—19	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20—29	14	8	1	12.5	6	0	0	0	0	0	0	0	0	0	0	0
30—39	19	5	0	0	11	1	0.09	1	0	0	2	1	50	0	0	0
40—49	17	2	0	0	9	1	11.11	5	1	20.00	1	1	100	0	0	0
50—59	26	1	0	0	12	3	25.00	11	4	36.36	2	2	100	0	0	0
60—69	8	0	0	0	3	0	0	3	3	100	2	2	100	1	1	100
70—	5	0	0	0	0	0	0	3	3	100	1	1	100	1	1	100
Total	138	65	1	1.54	41	5	12.20	23	11	47.83	8	7	87.5	1	1	100

TABLE XXVII. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF A. RENALIS IN MALE (TOKYO UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (326 Cases, Renal Sclerosis 85, 26.07%)														
		—			±			+			++			+++		
		No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%
0—9	67	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10—19	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20—29	25	18	0	0	7	1	14.28	0	0	0	0	0	0	0	0	0
30—39	30	10	0	0	10	3	30.00	9	6	66.66	1	1	100	0	0	0
40—49	52	7	0	0	26	2	7.69	17	7	41.18	2	2	100	0	0	0
50—59	54	3	0	0	18	3	16.66	26	7	26.92	6	4	66.66	1	1	100
60—69	55	1	0	0	9	4	44.44	22	11	50.00	14	11	78.57	9	9	0
70—	19	0	0	0	1	0	0	10	6	60.00	8	7	87.50	0	0	0
Total	326	130	0	0	71	13	18.31	84	37	44.04	31	25	80.64	10	10	100

TABLE XXVIII. RELATIONSHIP BETWEEN THE GRADE OF ATHEROSCLEROSIS OF A. CORONARIA AND THAT OF A. RENALIS IN FEMALE (TOKYO UNIVERSITY)

Age	Total No. of Cases	Coronary Sclerosis (174 Cases, Renal Sclerosis 24, 13.79%)														
		—			±			+			++			+++		
		No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%	No. of Cases	Scl. of A. renal.	%
0—9	52	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10—19	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20—29	20	13	0	0	7	0	0	0	0	0	0	0	0	0	0	0
30—39	21	6	1	16.66	12	0	0	1	0	0	2	0	0	0	0	0
40—49	24	6	0	0	11	0	9.09	5	2	40.00	1	1	100	1	1	100
50—59	32	2	0	0	14	1	7.14	13	2	15.38	2	2	100	1	1	100
60—69	10	0	0	0	4	2	50.00	4	4	100	2	2	100	0	0	0
70—	5	0	0	0	1	1	100	2	1	50.00	1	1	100	1	1	100
Total	174	89	1	1.12	49	5	10.20	25	9	36.00	8	6	75	3	3	100

TABLE XIX. COMPARISON OF THE GRADE OF SCLEROSIS BETWEEN THE LEFT AND THE RIGHT CORONARY ARTERIES (KYUSHU UNIVERSITY)

	Cases	%
l>r	290	66.2
l=r	93	21.2
l<r	55	12.6
Total	438	100.0

TABLE XXXI. THE PREDOMINANCE OF THE LEFT OR THE RIGHT CORONARY ARTERIES (TOKYO UNIVERSITY)

	Cases	%
Group I (l<r)	445	89.18
Group II (l=r)	36	7.21
Group II (l>r)	18	3.61
Total	499	100.00

TABLE XXX. COMPARISON OF THE GRADE OF SCLEROSIS BETWEEN THE LEFT AND THE RIGHT CORONARY ARTERIES (TOKYO UNIVERSITY)

	Cases	%
l>r	111	38.54
l=r	136	47.22
l<r	41	14.24
Total	288	100.00