PRACE

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CRANIOLOGICAL CHARACTERISTICS OF THE 14TH-17TH CC. POPULATION IN LITHUANIA. II. FEMALE CRANIA AND SUMMARY TABLES OF BOTH SEXES

This report deals with 10 samples of female skulls, which general characteristics, sizes, dating, methods of investigation together with main references are presented in the previous part of this work [Česnys 1976]. The palaeodemographical and paleoodontological analysis as well as the reconstruction of stature according to the measurements of long bones of extermities are performed in some other publications [Česnys, Papreckiene 1977; Česnys 1979; Česnys, Urbanavičius 1978].

The range of intergroup variation of the main cranial measurements of female series coincides with that of male ones (Table 1) and with some exceptions, is almost identical to the variation range of the synchronous materials from Latvia. A high variation range is characteristic of the nasal and orbital breadth (nl-nl, mf-ek) as well as their indices (54 : 55, 52 : 51). Like in the male series the variation range of the female sample increases mostly due to the series that are scanty and consist only of several skulls. There, the mean values of the Šlapgiris and Sūduva series form the limits of intergroup variation of almost half (44,4%) and one of the limits of one third (33,3%) of the main cranial traits, being the most valuable in racial diagnosis in East Europe. The Šlapgiris and Sūduva series decided the intergroup variation range of 77,7% of craniometric traits in general. It is either a statistical distortion, or these series represent a special anthropological type, remote from the type of the other Lithuanian series, and revealing of its origin can be the aim of further investigations. The female skulls from Šlapgiris are relatively robust and stand out from synchronous Lithuanian craniological background for the maximal cranial length (g-op), bizygomatic, nasal and orbital breadth (zy-zy, nl-nl, mf-ek) and nasal index (54 : 55) as well as for the minimal orbital and simotic indices (52 : 51, SS : SC), orbital height, nasal, zygomaxillar and nasomalar angles. The

Table 1. The intergroup variation range of cranial traits (female crania)

Measurement after R. Martin	Lithuania, the 14th-17th cc.			Latvia, the 2nd half of the 2nd mil. A.D. (R. Denisova)			Lithuania, the 14th - 17th cc. without Šlapgiris and Sūduva		
	Min - Max	$M_1 - M_2$	$\frac{M_1 - M_2}{M_2}100$	Min - Max	$M_1 - M_2$	$\frac{M_1 - M_2}{M_2}100*$	Min - Max	$M_1 - M_2$	$\frac{M_1 - M_2}{M_2}100$
SS : SC	35,4 - 46,9	11,5	32,48	41,0 - 61,6	20,6	50,24	35,9 - 46,5	10,6	29,52
75(1)	21,0 - 28,3	7,3	34,76	21,0 - 29,2	8,2	39,04	22,7 - 28,3	5,6	24,66
DS : DC	50,9 - 61,9	11,0	21,61	54,8 - 62,6	7,8	14,23	50,9 - 61,9	11,0	21,61
8 : 1	75,5 - 82,9	7,4	9,80	75,8 - 80,0	4,2	5,54	75,5 - 79,0	3,5	4,63
55. n-ns	46,4 - 48,8	2,4	5,17	46,6 - 50,3	3,7	7,94	46,4 - 48,8	2,4	5,17
54 : 55	45,0 - 52,0	7,0	15,55	47,7 - 52,0	4,3	9,01	48,4 - 50,8	2,4	5,00
45. zy-zy	122,0 - 127,7	5,7	4,67	122,5 - 128,5	6,0	4,89	123,0 - 124,7	1,7	1,38
54. nl - nl	21,6 - 25,0	3,4	15,74	22,7 - 25,7	3,0	13,21	22,7 - 24,2	1,5	6,92
48. n-pr	63,5 - 67,5	4,0	6,30	63,3 - 69,8	6,5	10,26	63,5 - 67,5	4,0	6,30
52. orbital h.	30,5 - 32,8	2,3	7,54	31,7 - 33,6	1,9	5,99	30,9 - 32,8	1,9	6,14
48 : 45	50,9 - 54,2	3,3	6,48	50,9 - 54,8	3,9	7,66	50,9 - 54,2	3,3	6,48
8. eu-eu	134,7 - 138,0	3,3	2,45	135,7 - 141,8	6,1	4,49	134,7 - 137,7	3,0	2,22
51. mf-ek	39,0 - 42,5	3,5	8,97	40,7 - 42,6	1,9	4,66	39,3 - 40,8	1,5	3,78
52 : 51	71,7 - 80,3	8,6	11,99	75,6 - 80,6	5,0	6,61	77,3 - 80,3	3,0	3,88
zygomax. angle	118,2 - 126,8	8,6	7,27	122,0 - 129,2	7,2	5,90	122,7 - 126,8	4,1	3,34
1. g-op	166,3 - 179,5	13,2	7,94	169,7 - 180,2	10,5	6,18	173,7 - 179,3	5,6	3,22
17. ba-b	125,4 - 133,0	7,6	6,06	125,7 - 134,4	8,7	6,92	127,5 - 133,0	5,5	4,31
nasomalar angle	136,1 - 141,6	5,5	4,04	137,2 - 143,2	6,0	4,37	137,3 - 141,6	4,3	3,13

* computed by the author of the present report

Table 2. The distribution of main measurements in the pooled female collection of the 14th - 17th cc. Lithuanian crania

Measurement after R. Martin		N	M	S	V	A	E
	SS : SC	165	41,66	10,06	24,14	0,51	0,97
75(1)	nasal angle	121	25,49	6,03*	23,65	0,55	1,64**
	DS : DC	162	56,22	8,30	14,76	0,17	0,11
I_1	8 : 1	176	77,71	3,69*	4,74	0,54	0,71
55.	n-ns	172	47,79	3,05	6,38	−0,04	−0,36
I_{48}	54 : 55	171	49,33	5,19*	10,52	1,10**	3,26**
45.	zy-zy	158	123,98	4,35	3,50	0,01	0,26
54.	nl-nl	171	23,52	1,79	7,61	0,21	0,19
48.	n-pr	155	65,08	4,13	6,34	0,16	0,06
52.	orbital height	172	31,83	3,29*	10,33	−5,13**	49,05**
I_{39}	48 : 45	144	53,13	5,33*	10,03	3,63**	20,59**
8.	eu-eu	178	136,73	4,98	3,64	0,35	−0,06
51.	mf-ek	172	40,15	1,83	4,55	0,44	0,53
I_{42}	52 : 51	171	79,46	5,33	6,70	0,50	1,68**
	zygomax. angle	153	123,15	4,91	3,98	0,21	−0,44
1.	g-op	176	176,12	6,31	3,58	−0,33	−0,29
17.	ba-b	170	129,70	4,98	3,83	0,03	−0,17
	nasomalar angle	173	139,31	4,50	3,23	0,44	0,66

* too high value
** P < 0,05

skulls from Sūduva, that come from two different cemeteries on the left bank of the Nemunas river [Č e s n y s 1976], are more gracile and distinguished by the maximal values of the cranial, orbital and simotic indices (8 : 1, 52 : 51, SS : SC), cranial breadth (eu-eu) and zygomaxillar angle as well as by the minimal values of the nasal index (54 : 55), bizy-gomatic, nasal and orbital breadth (zy-zy, nl-nl, mf-ek), cranial length (g-op) and basi-bregmatic height (ba-b). When the series from Šlapgiris and Sūduva are eliminated, the intergroup variation range diminishes considerably (Table 1) and becomes much lower than that in the synch-ronous Latvian craniological materials testifying the relative craniological homogeneity of the Lithuanian female crania.

Distributions of main cranial measurements in the pooled female sample are close to the normal one (Table 2): indices of asymmetry and excess do not reach the limit of significance in most cases. Nasal angle, orbital height, facial, nasal and orbital indices are the exceptions. The deviation of the three last indices from normal distribution is not due, beyond doubt, to the lack of morphological homogeneity of the female material as a whole, but rather can be contributed to the fact that va-riation range of craniometric indices, being ratio between two or more traits, can be very high. Due to the high value of the standard deviation, the basis of the distribution curve becomes then very wide, and it's peak rises relatively high resulting in a positive excess. The excess in the distribution curve of nasal angle and orbital height appears due to the same reason. It is evident in the distribution histogram of these traits that the standard deviations can be considerably extended by either very

Table 3. The coefficients of sexual dimorphism in the 14th - 17th cc. Lithuanian craniological materials

Measurement after R. Martin	$\frac{\delta}{\circleddash}$	Measurement after R. Martin	$\frac{\delta}{\circleddash}$	Measurement after R. Martin	$\frac{\delta}{\circleddash}$
1. g-op	1,044	23.	1,041	45. zy-zy	1,070
5. n-ba	1,047	24. po-b-po	1,041	48. n-pr	1,057*
7. ba-o	1,043	25. n-o	1,037	51. mf-ek	1,032
8. eu-eu	1,038	26. n-b	1,037	52.	0,998
9. ft-ft	1,067**	27. b-l	1,036	54. nl-nl	1,023*
10. co-co	1,041	28. l-o	1,044**	55. n-ns	1,060
12. ast-ast	1,037	29. n-b	1,046**	66. go-go	1,097**
16.	1,070**	30. b-l	1,037	69. id-gn	1,110
17. ba-b	1,042	31. l-o	1,027*	69(3).	1,102**
20. po-b	1,036*	40. ba-pr	1,053**	71.	1,078**

*   too low value of the coefficient
** too high value of the coefficient

Table 4. The Penrose's coefficients of distance among the 14th - 17th cc. Lithuanian female samples

No Sample	1	2	3	4	5	6	7	8	9
1. Jakštaičiai									
2. Kavarskas	0,16								
3. Gėluva	0,21	0,16							
4. Sūduva	0,83	0,75	0,47						
5. Ruseiniai	0,36	0,20	0,15	0,44					
6. Liepiniškes	0,20	0,19	0,21	0,72	0,23				
7. Uliūnai	0,10	0,26	0,26	0,76	0,25	0,12			
8. Skrebinai	0,19	0,11	0,07	0,55	0,13	0,09	0,24		
9. Rumšiškes	0,20	0,11	0,08	0,45	0,15	0,12	0,20	0,08	
10. Šlapgiris	0,49	0,54	0,57	1,49	0,77	0,37	0,65	0,42	0,57

high or low solitary variants. Finally, a positive excess does not testify an intermingling of two different variation rows [B u n a k 1927]. Thus the analysis of the distribution of the main cranial measurments in pooled female sample points to the homogeneity of the materials.

Sexual dimorphism is rather distinct in the 14th - 17th cc. Lithuanian craniological collection (Table 3): only 4 of 30 traits (13,3%) have too low coefficients of sexual dimorphism, and the coefficients are too high in 26,7% of the cases when comparing with the standard coefficients of sexual dimorphism [A l e k s e e v 1964]. Also it testifies a sufficiently correct sex diagnosis of the crania.

The majority of Penrose's coefficients of the generalized distance between the sample pairs (Table 4) are minimal (0,03 - 0,29), and this points to a close affinity of the samples. Only the crania from Šlapgiris and Sūduva stand out from this compact background. They are remote from the rest of series and especially from one another. The reason is that these two series are extremely inadequate and statistically not representative.

Consequently, a narrow range of the intergroup variation of the main

craniological traits and the normalacy of their distribution as well as the results of Penrose's analysis allow to assert that the pooled female cranial collection from the 14th - 17th cc. Lithuanian cemeteries represents, with some exceptions, a rather homogeneous anthropological type. This can be characterized according to the statistical parameters of the pooled sample (Table 2).

In general, the anthropological type of Lithuanian females corresponds to that of males [Česnys 1976, Česnys 1978]. It is notable for the medium dimensions of cranial vault with the slight tendency of the cranial length toward higher values. The general shape of the vault is mesocranic. The face is of medium size, mesenic. The measurements of the nose are of medium size, its shape mesorrhinic, and its bridge high (the simotic and dacryal indices may be characterized as large). The nasal bones form a large angle with a general line of a facial profile. The orbits are low and mesoconchal as in the case of male crania. The crossection of the face (a horizontal profile) is strongly pronounced since the value of the nasomalar angle lays between the category of low and medium and that of the zygomaxillar angle is very low. Thus the crania are strictly caucasoid.

From the typological point of view, mesomorphous shape of the skull predominates in the pooled Lithuanian sample of the 14th - 17th cc. female crania (Table 5): the mesocrany is combined with mesenic face almost in one third of cases and the mesocrany is joined with the orthocrany in more than one third of the investigated skulls. The brachycrany happens a little more often than dolichocrany (25,17 and 19,58[0/0]), and both of these cranial shapes are combined with mesenic face and orthocranic vault in equal frequency. Leptenic face is found a little more

Table 5. The frequency of combinations of morphological forms in the 14th - 17th cc. pooled female sample (N) %

I_1	I_{39}						I_2			
	Hyper-euryen	Euryen	Mesen	Lepten	Hyper-lepten	Totally	Chamae-cran	Ortho-cran	Hypsi-cran	Totally
Ultradolichocran	—	—	— (1)	—	—	— (1)	—	— (1)	—	(1)
Hyperdolichocran	— (1)	— (4)	0,70 (17)	— (5)	—	0,70 (27)	— (6)	0,59 (25)	—, (5)	0,59 (36)
Dolichocran	0,70 (1)	2,80 (13)	11,88 (47)	3,50 (17)	— (1)	18,88 (79)	3,58 (5)	14 89 (61)	2,97 (25)	21,44 (91)
Mesocran	0,70 (7)	9,10 (18)	32,87 (7)	11,88 (2)	0,70 (34)	55,25 (1)	2,97 (19)	36,31 (17)	14,89 (37)	54,17
Brachycran	— (1)	4,89	12,59	4,89 (1)	1,40 (1)	23,77	0,59	11,31 (2)	10,12	22,02 (2)
Hyperbrachycran	—	0,70	—	— (1)	—	0,70 (1)	—	1,19 (1)	— (1)	1,19 (1)
Ultrabrachycran	—	—	—	0,70	—	0,70	—	—	0,59	0,59
Totally	(2) 1,40	(25) 17,49	(83) 58,04	(30) 20,97	(3) 2,10	(143) 100,00	(12) 7,14	(108) 64,29	(48) 28,57	(168) 100,00

Table 6. The distribution of same cranial indices in the 14th - 17th
cc. Lithuanian female collection (N) %

I_{13}		I_{42}		I_{48}	
Stenometop	(44) 24,86	Chamaekonch	(40) 23,67	Leptorrhin	(61) 35,88
Metriometop	(70) 39,55	Mesokonch	(106) 62,72	Mesorrhin	(52) 30,59
Eurymetop	(63) 35,59	Hypsikonch	(23) 13,61	Chamaerrhin	(48) 28,24
				Hyperchamaerrhin	(9) 5,29
Totally	(177) 100,00		(169) 100,00		(170) 100,00

often than the euryenic face (23,07 and 18,89⁰/o). The percentage of
metriometopy and eurymetopy is equal and that of stenometopy is so-
mewhat lower (Table 6). While the amount of chamaeconchal and
mesoconchal skulls was the same in male series [Česnys 1976], the
mesoconchy predominates in the female series, and the chamaeconchal
crania occur two times less frequent and the hypsiconchal twice more
often than it was in the male collection. Apparently, it could be one of
the expressions of sexual dimorphism. On the contrary to the male
materials, leptorrhinic, mesorrinic and chamaerrhinic skulls happen at
a nearly equal frequency. Thus the general trend towards chamaerrhiny
is evident in the female sample.

In order to look for analogies with the female anthropological type
from the 14th-17th cc. Lithuania, synchronous samples from the neigh-
bouring territories were chosen, and Penrose's generalized distance was
calculated (Table 7). After glancing over the row of Penrose's coefficients,
it is evident that the pooled Lithuanian female sample is closest to
the series from the immediate neighbouring territories — Latvia, West

Table 7. The Penrose's coefficients between the 14th - 17th cc. Lithuanian female sample and
synchronous samples from the neighbouring territories

Sample	Period (cc).	Author	C_{R2}
Purgaili (Latgala, Latvia)	17 - 18	R. Denisova, 1973	0,12
Selpils (Augzeme, Latvia)	16 - 17	,,	0,26
Jaunkandava (Kurzeme, Latvia)	16 - 17	,,	0,14
Dudinas (Vidzeme, Latvia)	16 - 17	,,	0,11
Martinsala (Vidzeme, Latvia)	14 - 17	,,	0,15
Byelorussia (selected sample)	18 - 19	I. Salivon, 1969	0,22
Novogrodek (West Byelorussia)	11 - 12	,,	0,08
Grodek (the West Ukraine)	13 - 17	T. Belniak, 1961	0,08*
Nikolskoye (Central Russia)	16 - 18	T. Trofimova, 1941	0,33*
Staraya Ladoga (North-West Russia)	17 - 18	V. Alekseev, 1969	0,16
Szczecinek (Pomorze, Poland)	15 - 18	M. Kaliszewska, 1967	0,45*
Oškobrh (Central Bohemia)**	14 - 17	M. Blajerová, 1974	0,82*

* the parameters of the nasal bridge and the angles of the facial cross-section are absent.
** the samples pooled by the author of present work.

Table 8. The Penrose's distances among three Lithuanian
female series dating from different times

	the 2nd-4th cc.	the 14th-17th cc.	the 20th c.
the 2nd-4th cc.		0,10*	0,51*
the 14th-17th cc.	0,30		0,23*
the 20th c.	0,95	0,26	

* g-op, eu-eu and I_1 eliminated

Table 9. Comparison of three Lithuanian female series
dating from different times (the mean values of the 2nd - 4th
c.c sample are considered to be 100%)

Measurement after R. Martin		the 14th-17th cc.	the 20th c.
	SS : SC	98,25	110,38
75(1).	nasal angle	98,42	115,83
	DS : DC	103,92	107,76
I_1	8 : 1	107,63	112,19
55.	n-ns	101,04	103,59
I_{48}	54 : 55	97,68	95,25
45.	zy-zy	100,80	101,87
54.	nl-nl	98,82	98,74
48.	n-pr	98,91	96,81
52.	orbital height	102,02	105,45
I_{39}	48 : 45	98,57	94,99
8.	eu-eu	103,74	106,83
51.	mf-ek	98,17	96,82
I_{42}	52 : 51	104,14	108,91
	zygomaxillar angle	97,74	99,44
1.	g-op	96,40	95,13
17.	ba-b	98,03	93,95
	nasomalar angle	101,32	99,78

Byelorussia (Novogrodek), the West Ukraine (Grodek), and North-West
Russia (Staraya Ladoga). Geographically more remote series differ from
the Lithuanian one considerably.

Looking for local sources of origins of the described anthropological
type, generalized distances between Lithuanian craniological series from
different times were confronted (Table 8). Penrose's coefficients are
quite the same as they were in the male case [Č e s n y s 1976]: the 14th-
-17th cc. sample occupies an interstitial position between the earlier (the
2nd-4th cc.) and the later (the 20th c.) samples. The situation remains
the same when the craniological traits (g-op, eu-eu, 8 : 1), mostly affect-
ed by epochal changes, are eliminated from the analysis. Solely, the
14th-17th cc. sample moves a little closer to the earlier (the 2nd-4th cc.)
sample. The 14th-17th cc. sample maintains its intermediate posi-
tion (Table 9) when mean values of two later series (the 14th-17th cc. and
the 20th c.) are expressed in percentage of those in the earlier series (the
2nd-4th cc.). It was the same also in the male craniological materials

Table 10. The summary results of the craniometric examination of materials from the 14th - 17th cc. Lithuanian cementeries

	Measurement after R. Martin	Males			Females		
		N	M	S	N	M	S
1.	g-op	206	183,9	5,5	176	176,1	6,3
2.	g-i	205	178,2	6,2	176	169,4	6,3
8.	eu-eu	206	142,0	5,7	178	136,7	5,0
17.	ba-b	201	135,2	4,5	170	129,7	5,0
20.	po-b	204	116,2	8,3	175	112,1	3,8
23.	g-op	206	521,9	14,6	177	501,0	14,1
24.	po-b-po	206	314,6	11,4	175	302,2	9,4
25.	n-o	202	372,8	12,5	167	359,4	13,3
26.	n-b	209	128,5	6,3	176	123,8	6,0
27.	b-1	211	128,4	7,3	178	123,9	7,1
28.	l-o	204	115,8	6,8	168	110,9	7,1
29.	n-b	209	112,3	4,9	177	107,3	8,7
30.	b-l	207	114,5	8,9	178	110,4	5,8
31.	l-o	204	96,0	4,9	168	93,4	4,9
9.	ft-ft	206	96,6	4,2	173	90,5	3,7
10.	co-co	209	120,4	5,4	177	115,6	5,6
11.	au-au	206	124,4	5,6	177	118,1	5,0
12.	ast-ast	203	109,6	5,0	172	105,6	4,3
5.	n-ba	199	101,3	4,3	168	96,7	4,5
7.	ba-o	195	36,3	2,7	160	34,8	2,6
16.	f-n magnum width	189	30,3	2,4	155	28,3	2,1
38.	cranial capacity*	190	1466,2	78,5	169	1424,4	104,8
40.	ba-pr	188	97,3	4,8	155	92,4	5,0
45.	zy-zy	193	132,7**	6,3	158	124,0	4,3
47.	n-gn	156	117,7	6,5	130	110,0	11,5
48.	n-pr	186	68,9	4,7	155	65,1	4,1
48(2).	pr-gn	151	49,1	4,5	129	45,3	4,5
48(3).	maxillar height	161	43,9	3,5	142	39,9	4,5
43.	fmt-fmt	207	104,4	4,2	176	100,2	3,6
46.	zm-zm	194	94,7	4,7	153	91,2	4,6
60.	pr-alv	177	52,9	2,9	151	50,2	3,0
61.	ekm-ekm	156	61,2	3,4	125	58,4	3,3
62.	ol-sta	191	45,5	2,8	157	43,2	2,8
63.	enm-enm	148	39,9	2,7	116	38,6	2,6
64.	palatal height	122	12,8	2,9	104	11,2	2,3
55.	n-ns	205	50,7	3,4	172	47,8	3,1
54.	nl-nl	205	24,1	1,9	171	23,5	1,8
56.	n-rhi	127	22,4	3,3	107	22,4	2,7
51.	mf-ek	200	41,4	2,0	172	40,1	1,8
51(a).	d-ek	194	38,5	1,8	166	37,5	1,6
52.	orbital height	199	31,8	2,3	172	31,8	3,3
53.	orbital depth	160	49,6	2,3	139	47,8	2,4
50.	mf-mf	201	19,9	1,9	173	18,7	2,2
43(1).	fmo-fmo	205	96,9	4,2	173	93,4	3,5
	n over fmo-fmo level	205	18,4	2,6	173	17,3	2,2
	zm-zm	194	94,4	4,7	153	91,2	4,6
	ss over zm-zm level	194	26,3	2,9	153	24,8	2,9
77.	nasomalar angle	204	138,4	4,3	173	139,3	4,5
	zygomaxillar angle	191	121,9	5,0	153	123,1	4,9
49(a).	DC	190	21,5	2,5	162	20,4	2,5
	DS	190	12,9	9,6	162	11,3	7,3
	SC	190	9,5	2,0	165	9,7	1,2
	SS	190	4,4	1,2	165	3,8	1,0
	DS : DC	190	57,5	9,3	162	56,2	8,3
	SS : SC	190	46,2	12,4	165	41,7	10,1
	f. canina depth	169	4,9	1,6	129	4,5	1,6
	os zygomaticum width	164	52,7	4,0	124	48,4	5,5
	the curve of the arch of the os zygomaticum	164	12,6	1,8	124	11,8	2,0

Table 10 (continued)

Measurement after R. Martin		Males			Females		
		N	M	S	N	M	S
72.	n-pr-OAE	157	86,2	3,6	156	85,1	4,2
73.	n-ns-OAE	189	87,9	3,9	158	88,0	4,2
74.	ns-pr-OAE	173	79,2	6,9	150	75,8	7,7
75.	n-rhi-OAE	155	57,3	7,0	130	59,4	6,0
75(1).	nasal angle	144	29,3	5,7	121	25,5	5,1
32.	n-m-OAE	175	85,1	5,4	168	87,7	4,3
	g-m-OAE	199	78,0	5,1	167	81,8	5,2
33 (4).	occipital angle	195	138,1	6,1	164	121,6	5,2
I_1	8 : 1	203	77,2	3,0	176	77,7	3,7
I_2	17 : 1	191	74,9	3,2	169	73,5	3,9
I_3	17 : 8	196	95,3	5,0	168	94,3	5,9
I_{12}	9 : 8	194	67,7	3,2	178	68,3	3,5
I_{13}	9 : 10	206	79,9	3,5	177	80,4	3,6
I_{22}	29 : 26	209	87,2	4,0	177	87,1	1,9
I_{45}	9 : 45	192	72,9	4,4	156	75,4	3,3
I_{39}	48 : 45	172	52,0	5,2	144	53,1	5,3
I_{38}	47 : 45	156	84,4	8,1	121	88,6	5,1
I_{42}	52 : 51	198	76,6	5,2	171	79,5	5,3
$I_{42}(b)$	52 : 51(a)	193	82,5	5,5	166	84,6	5,6
I_{48}	54 : 55	204	47,7	4,7	171	49,3	5,2
68.	mandibular length	186	76,0	4,6	161	72,1	4,2
68(1).	mandibular length	182	107,9	5,4	151	102,6	5,2
65.	kdl-kdl	160	118,7	6,5	126	111,5	6,4
66.	go-go	186	103,2	6,4	157	94,0	5,6
67.	ml-ml	189	44,8	2,3	167	43,2	2,6
69.	id-gn	174	33,1	2,9	142,	29,8	2,7
69(1).	mental height	183	32,7	2,5	142	29,5	2,5
69(2).	molar height	153	28,2	2,7	116	25,2	2,5
69(3).	thickness of the body	197	11,8	1,4	168	10,7	1,6
70.	height of the ramus	188	64,8	5,6	167	57,6	4,9
70(a).	height of the ramus	190	60,4	6,8	167	53,5	7,0
71.	width of the ramus	192	31,6	2,9	169	29,3	2,3
79.	mandibular angle	190	113,0	4,4	165	126,9	5,3

* after Pearson and Manouvrier (mean)
** appologies for the mistake of this measurement in the previous publication

[Č e s n y s 1976]. In comparison to the 2nd-4th cc. crania, it is possible to state an even brachycranization during both later time intervals occuring due to the increase in cranial breadth and decrease in its length of almost the same intensity. In addition to this, the height of the vault diminished considerably. It is necessary to point out to some degree of the face euryenization that occured due to the increase in bizygomatic breadth and decrease in the facial height. In comparison to the 2nd-4th cc. materials, the orbits of later female crania are much higher due to nearly equal increase in their height and decrease in width. The nasal index diminished owing to the increase in the nasal height and decrease in its breadth. Conformably to the male collection, the indices of the nasal bridge (SS : SC, DS : DC) and the angle between the nasal bones and the line of the facial profile, the most variable traits in East Europe and the Caucasus, fluctuate in heterochronous Lithuanian samples without any definite trend, and the traits of the crossection of the face

(nasomalar and zygomaxillar angles) remain nearly stable regardless of slight fluctuations.

Thus the ties of descent bind the 14th-17th cc. Lithuanian female crania with the earlier and later ones.

CONCLUSIONS

1. The female skulls from the 14th-17th cc. Lithuanian cemeteries represent a quite homogeneous anthropological type.

2. This type almost does not differ from the type of the male crania regardless of sexual dimorphism that is rather distinct in the craniological collection of this period.

3. As to geographical analogies and historical continuity of an anthropological type, the female crania repeat the regularities that were characteristic of the male skulls.

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KRANIOLOGICZNA CHARAKTERYSTYKA POPULACJI LITEWSKIEJ
Z XIV - XVII WIEKU. II. CZASZKI ŻEŃSKIE I TABELE SUMARYCZNE DLA
OBU PŁCI

GINTAUTAS ČESNYS

Autor przedstawia kraniometryczną charakterystykę szeregu serii litewskich, prowadząc jednocześnie, przy zastosowaniu metody Penrose'a, analizę zmienności wewnątrz- i międzygrupowej w obrębie zbioru serii litewskich oraz serii pochodzących z terytoriów republik sąsiednich.

W odniesieniu do czaszek żeńskich Autor wyciąga następujące wnioski.

Czaski żeńskie pochodzące z cmentarzysk litewskich XIV - XVII wieku reprezentują homogeniczny typ antropologiczny. Typ ten prawie nie różni się od typu czaszek męskich, mimo wyraźnego dymorfizmu płciowego w badanych zbiorach. W odniesieniu do zależności geograficznych i ciągłości czasowej typu antropologicznego, regularności występujące w zbiorze czaszek żeńskich są takie same jak w przypadku serii męskich, tzn. osobnicy z Litwy z badanego okresu są podobni do Litwinów żyjących wcześniej oraz ludności współczesnej, przeciętne podobieństwa wykazują oni z równoczasową ludnością z terenu ościennych republik (Łotwy i Białorusi).