https://doi.org/10.18778/1898-6773.47.1.02

PRZEGLĄD ANTROPOLOGICZNY
Tom 47, z. 1 — Poznań 1981

IRENA PARPECKIENĖ, GINTAUTAS ČESNYS

ODONTOLOGY OF THE 14th-17th CENTURY LITHUANIANS. I. ETHNIC ODONTOLOGY AND ODONTOGLYPHICS

Investigations in the field of Lithuanian ethnic odontology started just recently [Papreckienė, Česnys 1978, Zubov 1972], although dental morphology may be very helpful when solving the problem of ethnogenesis in all its complexity. History of the odontological type of modern population can be elucidated by means of ethnic palaeoodontology in general and odontoglyphics in particular, for the set of traits on the masticatory surfaces of the molars (the pattern of ridges) has its own phylogenetic history and remains under strict genetic control [Zubov 1973]. Odontological survey of the present-day populations is usually based on wax prints of molars of children 7 - 15 years old, for in this age permanent teeth are already present, but their masticatory (occlusal) surfaces are not abrased yet. Unfortunately, craniological series of earlier populations contain very few skulls of individuals in that specific age category. However, every attempt to carry out odontoglyphical characteristics of earlier populations is undoubtedly quite stimulating. This kind of investigation is especially desirable in Lithuania, since the odontological picture of modern Lithuanians is being completed at the moment [Česnys, Papreckienė 1980, Papreckienė, Česnys 1978], and its interpretation requires a historical background. The present study was undertaken with a view to determine odontological type of Lithuanians in the 14th-17th century, to establish its possible geographical distribution and diversities and to elucidate distribution of odontometric, odontological and odontoglyphical traits.

MATERIALS AND METHODS

568 intact and 27 fragmentary skulls excavated at 29 burial sites and deposited in the ossary of the Department of Anatomy, Histology and Embryology (the Medical Faculty, the University of Vilnius, Lithuanian SSR) were investigated (Table 1), and 2,162 teeth on the right side

Table 1. The list of investigated Lithuanian materials

No	Cemetery	Region	Period (cc.)	Number of skulls		No	Cemetery	Region	Period (cc.)	Number of skulls	
				Complete	Fragmentary					Complete	Fragmentary
1	Pumpurai	Mažeikiai	16 - 17	28	–	16	Skrebinai	Jonava	14 - 17	38	–
2	Daubariai	Mažeikiai	17 - 18	3	–	17	Kriemala	Kaunas	14 - 15	2	–
3	Šapnagiai	Akmenė	16 - 17	27	1	18	Rumšiškės	Kaišiadorys	14 - 16	49	–
4	Jakštaičiai	Šiauliai	14 - 17	51	–	19	Norkūnai	Prienai	17	13	–
5	Šlapgiris	Kelmė	15 - 16	6	–	20	Tursučiai	Kapsukas	17 - 18	5	–
6	Akmeniai	Kelmė	15 - 17	3	–	21	Kaliesninkai	Alytus	16 - 17	8	–
7	Paprūdžiai	Raseiniai	15 - 16	10	–	22	Daškonys	Alytus	16 - 17	1	–
8	Arglaičiai	Raseiniai	15 - 16	24	2	23	Strėva	Trakai	16 - 17	7	–
9	Gėluva	Raseiniai	16 - 17	75	1	24	Tulpiakiemis	Ukmergė	17 - 18	12	1
10	Plaučiškiai	Pakruojis	16 - 17	43	–	25	Kavarskas	Anykščiai	16 - 17	44	19
11	Meldiniai	Pakruojis	16 - 17	3	–	26	Diktarai	Anykščiai	14 - 16	29	2
12	Puziniškis	Panevėžys	14 - 17	16	–	27	Riklikai	Anykščiai	16 - 17	3	–
13	Uliūnai	Panevėžys	16 - 17	5	–	28	Ažugiriai	Utena	15 - 17	11	–
14	Graužiai	Kėdainiai	15 - 17	4	–	29	Liepiniškės	Utena	15 - 17	27	–
15	Ruseiniai	Kėdainiai	14 - 17	21	1		Totally			568	27

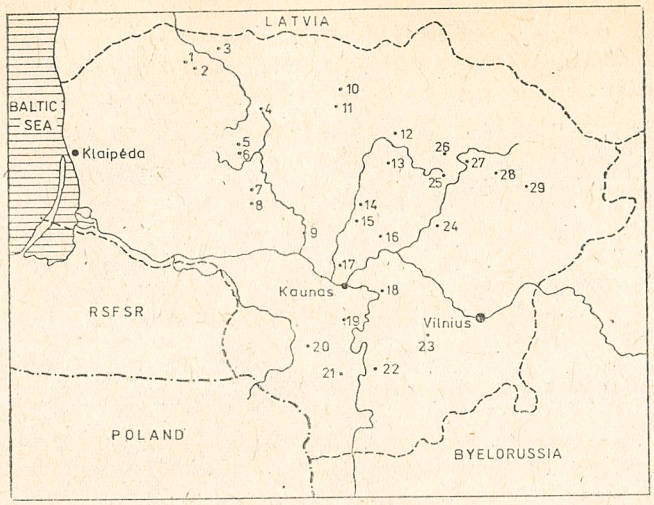

Fig. 1. The situation of the 14th - 17th cc. cemeteries in Lithuania

1 — Pumpurai, *2* — Daubariai, *3* — Šapnagiai, *4* — Jakštaičiai, *5* — Šlapgiris, *6* — Akmeniai, *7* — Paprūdžiai, *8* — Arglaičiai, *9* — Gėluva, *10* — Plaučiškiai, *11* — Meldiniai, *12* — Puziniškis, *13* — Uliūnai, *14* — Graužiai, *15* — Ruseiniai, *16* — Skrebinai, *17* — Kriemala, *18* — Rumšiškės, *19* — Norkūnai, *20* — Tursučiai, *21* — Kaliesninkai, *22* — Daškonys, *23* — Strėva, *24* — Tulpiakiemis, *25* — Kavarskas, *26* — Diktarai, *27* — Riklikai, *28* — Ažugiriai, *29* — Liepiniškės

of maxilla and mandible were measured. The same materials were investigated earlier from craniological [Česnys 1976, 1977] and palaeodemographical [Česnys, Urbanavičius 1978] point of view. Mesiodistal (*MD cor*) and buccolingual (or vestibulolingual, *VL cor*) crown diametres, the crown module (*m cor*) and the crown index (*I cor*) were registered odontometrically. The enamel prolongments on the M^2, the spacing (diastema) I^1-I^1, the crowding I^2, the I^2 reduction level, the shape of lingual surfaces of the upper incisors (I^1 and I^2), the form of the upper molars, connected with the hypocone reduction, the shape of the lower molars, the distal trigonid crest (*d.t.c.*), the deflecting wrinkle (*d.w.*) of the metaconid, the inner medial supplementary tubercle (or *tuberculum accessorium mediale internum, t.a.m.i.*) on the M_1 were checked up odontoscopically. The crowns of the first upper and lower molars from 92 infantile skulls were examined odontoglyphically. The course of the second metaconid furrow (*2 med*) on the M_1 and the shape of the first paracone furrow (*1 pa*) on the M^1 were registered by means of wax prints after Zubov [1968].

Entirety of materials were divided into three territorial groups (Western, Middle and Eastern Lithuania), on the basis of some archaeological, ethnographical and linguistic differences in order to detect possible geographical variations of odontological features. Synchronous odontological data from the neighbouring territories are extremely

scanty. Nevertheless, three groups from Latvia (the 16th-18th cc. South--Eastern and South-Western Latvians, the 14th-16th cc. Latgalians from Vaidas) as well as two groups from Byelorussia (the inhabitants of the 11th-12th cc. Novogrodek and the 18th-19th cc. Byelorussians) were chosen [Gravere R. 1974, 1978, Salivon 1971-72, Salivon et al. 1976.] for the purposes of comparison with Lithuanian materials.

RESULTS AND DISCUSSION

Tooth dimensions are under strict genetical control [Lindsey 1977, Townsend, Brown 1978], they do not depend on human physique in general and on stature in particular [Henderson, Corruccini 1976] and are relatively stable from the point of view of secular changes [Ménard 1975], that is why they may serve to some extent as the marking traits of main human races. According to our data, mesiodistal as well as buccolingual diameters of the molars correspond to the formula $M^1>M^2>M^3$ and $M_1>M_2>M_3$ (Table 2). The crown module that reflects general tooth size corresponds to the formula M1>M2>M3 in our materials, too. The 14th-17th cc. Lithuanians were mesodonts judging from M cor M^1. This is characteristic of the Northern Caucasoids [Zubov 1968], while the Southern Caucasoids are mainly microdonts. The crown index defines its shape. In present-day human populations, the index of upper molars exceeds 100%, and that of lower ones does not reach 100%. *I cor* M^2 and M^3 that are of the greatest diagnostical value fluctuate around 125% (*I cor* M^2 — 123.6%, and *I cor* M^3 — 127.5%) in our materials. Such a high index is typical of Caucasoid populations. According to the crown indices of lower molars, the 14th-17th cc. Lithuanians are considered to belong to the middle category.

Enamel prolongments are valuable odontological traits [Zubov 1973], while investigating palaeoanthropological materials. They make it possible to detect a Mongoloid admixture in Caucasoids [Salivon 1971-72]. Their frequency does not reach 30% in Caucasoid populations. The 14th-17th cc. Lithuanians show a rare incidence (5.8% in general) of pronounced forms (degrees 5 and 6) of the enamel prolongments (Table 3). There is no difference between the percentages of this feature in three geographical regions of the 14th-17th cc. Lithuania. According to this trait, the 16th-18th cc. South-Western Latvians are the closest to Lithuanians.

Spacing (diastema, or a span between the upper medial incisors) and crowding (or a lingual displacement of the upper lateral incisors) are traditional components of odontological programmes. Their variability

Table 2. Tooth dimensions of the 14th - 17th cc. Lithuanians

Tooth	N	VL cor.				MD cor.				M cor.				I cor.			
		M	m (M)	S	V	M	m (M)	S	V	M	m (M)	S	V	M	m (M)	S	V
13	198	7.89	0.04	0.64	8.11	7.27	0.03	0.45	6.18	7.58	0.03	0.50	6.59	108.74	0.46	6.49	5.96
14	192	8.65	0.05	0.66	7.63	6.11	0.03	0.46	7.52	7.38	0.04	0.53	7.18	141.80	0.57	7.88	5.48
15	176	8.79	0.05	0.65	7.39	5.98	0.04	0.49	8.19	7.39	0.04	0.49	6.63	147.15	0.69	9.16	6.22
16	191	10.95	0.05	0.68	6.21	9.71	0.04	0.53	5.45	10.33	0.04	0.57	5.51	113.32	0.46	6.43	5.67
17	217	11.00	0.05	0.76	6.90	8.92	0.04	0.65	7.28	9.96	0.04	0.63	6.32	123.58	0.53	7.88	6.37
18	131	10.29	0.09	1.05	10.20	8.10	0.07	0.84	10.37	9.21	0.07	0.77	8.36	127.44	0.92	10.54	8.27
43	177	7.14	0.04	0.61	8.54	6.36	0.04	0.50	7.86	6.77	0.04	0.60	7.38	112.36	0.78	10.37	5.77
44	172	7.18	0.04	0.57	7.93	6.27	0.03	0.46	7.33	6.72	0.04	0.54	7.88	114.59	0.54	7.06	6.87
45	185	7.74	0.05	0.67	8.65	6.31	0.04	0.52	8.24	7.03	0.04	0.48	6.80	122.93	0.56	7.63	6.20
46	173	9.91	0.04	0.57	5.75	10.21	0.04	0.57	5.58	10.06	0.04	0.52	5.16	97.19	0.34	4.43	4.55
47	202	9.54	0.05	0.70	7.33	9.86	0.05	0.71	7.20	9.70	0.05	0.66	6.80	96.87	0.33	4.52	4.66
48	141	9.16	0.06	0.74	8.07	9.76	0.08	0.93	9.52	9.46	0.07	0.80	8.45	93.98	0.41	4.86	5.17

Table 3. The frequency of enamel prolongments on M^2

Sample	N	Prolongments absent		Degrees											
				4		5		6		7		8		5+6	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
Western Lithuania (14 - 17 cc.)	112	88	78.57	18	16.07	6	5.35	0	–	0	–	0	–	6	5.35
Middle Lithuania (14 - 17 cc.)	109	82	75.22	20	18.34	5	4.58	2	1.83	0	–	0	–	7	6.42
Eastern Lithuania (14 - 17 cc.)	72	54	75.00	14	19.44	4	5.55	0	–	0	–	0	–	4	5.55
Total Lithuania (14 - 17 cc.)	293	224	76.45	52	17.74	15	5.11	2	0.68	0	–	0	–	17	5.80
Novogrodek (11 - 12 cc.)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25.00
Byelorussians (18 - 19 cc.)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	23.00
South-Eastern Latvians (16 - 18 cc.)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	18.10
South-Western Latvians (16 - 18 cc.)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11.80
Latgalians from Vaidas (14 - 16 cc.)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	17.70

is quite small in the 14th-17th cc. Lithuania, the mean frequency of the first trait being 8.46% and that of the second 0.4% (Table 4). Some increase in the spacing incidence is notable in the 20th c. [Paprec-kiene, Česnys 1978]: modern inhabitants of Eastern Lithuania show 12.03% and those of Northern Lithuania 11.87% of this odontological trait. Lindsey [1977] has proved the decrease in percentage of spacing with age. Perhaps this is the reason of the difference between the 14th-17th cc. and the 20th c. Lithuanians, for elder persons prevailed in our fossil materials and 12-14 year-old children were investigated as the 20th c. population. In general, the frequency of spacing and crowding in Lithuanians is quite characteristic of the Middle European odontological type. According to these traits, the 14th-17th cc. Lithuanians stand close to the inhabitants of the 16th-18th cc. South-Western Latvia and the 11th-12th cc. Novogrodek.

Reduction of the upper lateral incisors (degrees 1 and 2+3) does not show any marked geographical variability in our materials. Conoid I^2 (degrees 2+3) appears quite seldom (0.38%) and the lowest frequency of an initial phase of the trait (degree 1) is characteristic of the inhabitants of Middle Lithuania (Table 4).

Shovel-shaped upper medial incisors are under strict genetical control [Blanco, Chakraborty 1976, Portin, Alvesalo 1974] and do not show sexual dimorphism [Koski, Hantala 1952, Sawyer 1976]. This feature is quite common in Mongoloids. The shovel-shaped I^1 was extremely rare in the 14th-17th cc. Lithuania (Table 4): degree 2 of the trait was recorded only once (1.17%) in the series from Middle Lithuania, thus the mean frequency of the strongly pronounced (degrees 2+3) shovel-shaped I^1 was as low as 0.38% in the whole of Lithuania. The initial stage of the trait (degree 1) appeared somehow more often, but it did not show a geographical variability. According to this feature, the 14th-17th cc. Lithuanians stay within the limits of the Middle European odontological type and stand close to the 16th-18th cc. South-Western Latvians.

Hypocone reduction on M^2 is an odontological trait not defined enough from the point of view of racial diagnosis. It is likely to be very sensitive to epochal changes [Donina 1969, Frayer 1977, Gravere 1974]. The incidence of this feature (the sum of degrees 3 and 3+) was 31.74% in our materials, and some territorial diversities can be noted, namely, the lowest percentage (14.28) of the hypocone reduction was coupled with the highest percentage (28.57) of the M^2 crowns with four massive cusps in the Eastern part of Lithuania (Table 4). The similar small figures of the hypocone reduction are peculiar to the neighbouring synchronous materials with an exception of the 14th-16th cc. Latgalians. It is necessary to point out that the hypocone reduction (3 and 3+) appears more often in the 20 th cc. population:

Table 4. Odontology and odontoglyphics of the 14th - 17th cc. Lithuanians against a background of neighbouring synchronous materials

No	Sample	Spacing I^1 - I^1		Crowding I^2		Reduction of I^2						Shovel-shapedness I^1		
		N	%	N	%	N	0	1	2	3	2+3	N	1	2+3
1	Western Lithuania (14 - 17 cc.)	139	9.35	196	0.51	121	85.95	14.04	0.00	0.0	0.00	120	5.00	0.00
2	Middle Lithuania (14 - 17 cc.)	102	5.88	183	0.54	83	87.95	10.84	1.20	0.0	1.20	85	5.88	1.10
3	Eastern Lithuania (14 - 17 cc.)	78	10.25	117	0.00	59	83.05	16.94	0.00	0.0	0.00	52	5.76	0.00
4	Total Lithuania (14 - 17 cc.)	319	8.46	496	0.40	263	85.93	13.68	0.38	0.0	0.38	257	5.44	0.30
5	Novogrodek (11 - 12 cc.)	30	6.70	30	0.00	18	66.70	33.30	0.00	0.0	0.00	15	66.70	0.00
6	Byelorussians (18 - 19 cc.)	124	20.10	124	9.69	68	77.90	19.10	3.00	0.0	3.00	83	50.10	12.00
7	South-Eastern Latvians (16 - 18 cc.)	100	14.00	100	11.00	65	70.80	23.10	6.10	0.0	6.10	81	14.80	0.00
8	South-Western Latvians (16 - 18 cc.)	65	7.70	65	1.50	7	100.00	0.00	0.00	0.0	0.00	13	7.70	0.00
9	Latgalians from Vaidas (14 - 16 cc.)	20	0.00	20	0.00	3	100.00	0.00	0.00	0.0	0.00	3	0.00	0.00

Table 4. continued

Sample	Shovel-shapedness of I^2			Crown shape of M^1				Crown shape of M^2				Crown shape of M_1				
	N	1	2+3	N	4	4−	3 and 3+	N	4	4−	3 and 3+	N	six-cusped	five-cusped	+5	four-cusped
1	112	16.07	5.35	79	93.67	6.32	0.0	58	17.24	46.55	36.20	34	0.00	97.05	50.00	2.94
2	85	16.47	5.88	62	96.77	3.22	0.0	47	4.25	61.70	34.04	22	0.00	100.00	42.10	0.00
3	60	23.33	1.66	44	90.90	9.09	0.0	21	28.57	57.14	14.28	22	4.54	90.90	52.38	4.54
4	257	17.89	4.66	185	94.05	5.94	0.0	126	14.28	53.96	31.74	78	1.28	96.15	48.57	2.56
5	14	64.30	28.60	18	100.00	0.00	0.0	26	31.80	31.80	36.40	19	0.00	84.20	0.00	15.80
6	954	34.70	21.00	161	99.40	0.60	0.0	149	36.90	29.50	33.60	107	1.00	73.80	8.40	25.20
7	77	16.80	5.20	–	–	–	–	66	31.80	43.90	24.20	51	2.00	88.20	33.30	9.80
8	11	18.20	0.00	–	–	–	–	33	21.20	42.40	36.40	14	14.20	85.70	14.30	0.00
9	8	25.00	12.50	–	–	–	–	21	14.30	38.10	47.60	22	13.60	77.30	0.00	9.10

[57]

Sample No	Crown shape of M_2			Distal trigonid crest		Deflecting metaconid wrinkle		*T. a. m. i.*		The course of 2 *med* on M_1				The shape of *1 pa* on M^1			
	N	five-cusped	four-cusped	N	%	N	%	N	%	N	2 *med* (II)	2 *med* (III)	2 *med* (fc)	N	1	2	3
1	24	16.66	83.33	34	0.00	26	3.84	34	0.00	21	23.80	14.28	61.90	25	28.00	64.00	8.00
2	20	10.00	90.00	29	0.00	22	0.00	32	0.00	15	33.33	26.66	40.00	23	13.04	86.95	0.00
3	10	10.00	90.00	23	0.00	19	0.00	24	0.00	16	18.75	12.50	68.75	23	26.08	65.21	8.69
4	54	12.96	87.03	86	0.00	67	1.49	90	0.00	52	25.00	17.30	57.69	71	22.53	71.83	5.63
5	25	4.00	96.00	20	10.00	–	–	–	–	–	–	–	–	–	–	–	–
6	132	16.70	80.30	103	3.80	–	–	–	–	–	–	–	–	–	–	–	–
7	74	12.20	87.80	51	3.90	51	0.00	51	9.80	–	–	–	–	–	–	–	–
8	23	13.00	87.00	14	0.00	14	0.00	14	28.60	–	–	–	–	–	–	–	–
9	22	22.70	77.30	22	0.00	22	22.70	22	13.60	–	–	–	–	–	–	–	–

its frequency is as high as 59.04% in Eastern Lithuania and 57.09% in the Northern part of the country. Thus the epochal trend in the occurence of the trait is evident in our materials.

Shape of the lower molars, especially of M_1, is a very valuable trait in ethnic anthropology, for it is strongly genetically determined and slightly yields to reduction. The M_1 had commonly five cusps (96.15%) in the 14th-17th cc. Lithuanian population, with the form +5 prevailing, though the form Y5 appeared fairly often, too (Table 4). Consequently, the population belongs to the Middle European odontological type, that is notable for a low level of the M_1 reduction and a high frequency of the „+" crown pattern. The percentage of four-cusped as well as of six-cusped M_1 was very low (2.56% and 1.28 correspondingly). Some slight increase in the incidence of four-cusped and six-cusped M_1 in the Eastern part of Lithuania does not prove the trend towards gracility of an odontological type. According to the M_1 shape, Lithuanians in general, and Eastern Lithuanians especially, stand close to the 16th--18th cc. South-Eastern Latvians. On the contrary, the M_2 reduction appeared relatively often in the 14th-17th cc. Lithuania. That is especially true of the Middle and Eastern part of the country.

Distal trigonid crest, deflecting wrinkle of the metaconid and the medial supplementary internal tubercle are odontological features of high diagnostical value. The distal trigonid crest was not detected in our materials at all. The crest occurence is the differentiation test between the South European and Middle European odontological types within the Caucasoid race, consequently, its rare incidence may indicate to some degree the absence of the elements of the Southern gracile odontological type.

The deflecting wrinkle of the metaconid is the main 'Eastern' feature and it serves to distinguish the Northern gracile odontological type of Caucasoids from the Middle European one. According to its occurence the 14th-17th cc. Lithuanians are within the confines of the variation span of the latter type (Table 4). The medial supplementary internal tubercle (*t.a.m.i.*) was not represented in our materials at all.

Cource of the second metaconid furrow (*2med*) is one of odontoglyphical features. In European populations examined up to date, the second metaconid furrow quite often falls into the second intertubercular furrow forming the version *2med* (II). The average frequency of this version was 25.0% in the 14th-17th cc. Lithuanians, and the second metaconid furrow mostly used to fall (57.69%) into the central pit (*fc*). This indicates to some extent the slight influence of the Southern gracile odontological type.

Shape of the first paracone furrow (*1pa*) also belongs to the domain of odontoglyphics. Usually the third type, or lyre-shaped *1pa*, is taken into account [Zubov 1968]. The lyriform *1pa* is considered to be a sati-

sfactorily examined marker of the Mongoloid race. It was quite rarely detected (5.63%) in the 14th-17th cc. Lithuania, and it was completely absent in the Middle part of the country (table 4). To all appearances, in this case we are dealing with the especially 'pure' Western odontological complex.

Thus the 14th-17th cc. Lithuanians were notable for the absence of the distal trigonid crest, the very rare incidence of the deflecting wrinkle of the metaconid (1.49%), a rather low frequency of degrees 1 and 2+3 of shovel-shaped I^1 (correspondingly 5.44 and 0.38), of the crowding (0.4%), of six-cusped (1.28%) and four-cusped (2.56%) M_1 forms, of degrees 2+3 of I^2 reduction (0.38%), and of lyriform *1pa* (5.63%), moderate incidence of the spacing (8.46%), slightly more common occurence of form +5 on the M_1 crown (48.57%) and of four-cusped M_2 forms (87.03). On these grounds the 14th-17th cc. Lithuanians represent the Middle European odontological type. In this case it is possible to speak about the 'purity' of the Western odontological complex, because of the absence of the distal trigonid crest the low percentage of the deflecting metaconid wrinkle, the third type of the first paracone furrow and shovel-shaped incisors.

A comparison between different geographical regions demonstrates an odontological homogeneity of the 14th-17th cc. Lithuanians. A slight increase in the frequency of four-cusped and six-cusped M_1 forms is not coupled with a rise in the percentage of the deflecting metaconid wrinkle on the M_1 and shovel-shapedness of the upper medial incisors in the Eastern part of the country. That is why it is impossible to suggest an admixture of the Northern gracile type in this region. It should be added, too, the lack of the typical combination, characteristic of the Southern gracile type, for a slight decrease in the percentage of *2med* (II) form is not followed by an increase in the frequency of the distal trigonid crest and four-cusped M_1.

The homogeneity of the odontological type was tested using the mean measures of divergence [Grewal 1962], calculated from the main odontological traits among the largest series of skulls [Česnys, Papreckienė 1980]. The values of the measures are minimum and they repeat regularities that have appeared as a result of the analysis of the same craniological samples by means of Penrose distances computed for craniometric traits [Česnys 1976], and of the mean measures of divergence calculated from non-metric cranial traits [Česnys 1977]. Regional differences revealed in these parallel investigations are insignificant, and they reflect the same picture of the anthropological consolidation of the Lithuanian people, to all appearances, connected with formation and flourishing of the state, the Grand Duchy of Lithuania, which favoured merging of different tribal groups of the country.

CONCLUSIONS

1. According to tooth measurements the 14th-17th cc. Lithuanians were mesodonts, which is characteristic of the Northern Caucasoids.

2. The 14th-17th cc. Lithuanians represent a pronounced Middle European odontological type without any noticeable admixture of Southern gracile as well as of Northern gracile components.

3. Territorial odontological differences are so unimportant that all the inhabitants of the country are considered to be homogeneous from the odontological point of view.

4. The resemblance between 14th-17th cc. Lithuanians and the modern ones indicates a temporal succession of the odontological types in the territory during several last centuries and stability of the type.

Acknowledgement: The authors would like to express their cordial gratitude to Professor A. A. Zubov, Moscow Institute of Ethnography, Academy of Sciences of the USSR, for his help and valuable advice while carrying on the present work.

REFERENCES

Blanco R., R. Chakraborty, 1976, *The genetics of shovel shape in maxillary central incisors in man,* Am. J. Phys. Anthrop., 44, 233.

Česnys G., 1976, *Craniological characteristics of the 14th - 17th cc. population in Lithuania. I. Male crania,* Przegl. Antrop., 42, 233.

Česnys G., 1977, *Craniological characteristics of the 14th - 17th cc. population in Lithuania. III. Non-metric traits,* Przegl. Antr., 43, 347.

Česnys G., I. Papreckienė, 1980, *Vozmožnost izpolzovanija odontologičeskich priznakov dla rasčetov obobščennogo rasstojanija na primere litovskogo kraniologičeskogo materiala XIV - XVII vekov,* Vopr. Antrop. (in press).

Česnys G., V. Urbanavičius, 1978, *Materials on the historical demography of Lithuania in the 14th - 18th cc.,* Anthropologie (Brno), 16, 195.

Donina I. I., 1969, *O nekotorych epochalnych izmenenijach v strojenii zubnoj sistemy čeloveka,* Sov. Etnogr., 2, 35.

Frayer D. W., 1977, *Metric dental change in the European Upper Paleolithic and Mesolithic,* Am. J. Phys. Anthrop., 46, 109.

Gravere R., 1974, *Austrumlatviešu odontologiskais tips un tā izmainas laika gaita,* Arheologija un etnografija (Riga), 11, 273.

Gravere R., 1978, *Odontologičeskaja charakteristika drevnego i sovremennogo naselenija Latvii v svjazi s etničeskoj istorijej Latyšej.* (Dissertacija). Moskwa.

Grewal M. S., 1962, *The rate of genetic divergence of sublines in the C57 BL strain of mice,* Genet. Res., 3, 226.

Henderson A. M., R. S. Corruccini, 1976, *Relationship between tooth size and body size in American Blacks,* J. Dent. Res., 55, 94.

Koniev R. S., 1971, *Redukcija zubnoj sistemy v etničeskich gruppach Kavkaza v sviazi s voprosami ich proischoždenija,* Sov. Etnogr., 3, 96.

Koski K., E. Hantala, 1952, *On the frequency of shovel-shaped incisors in the Finns,* Am. J. Phys. Anthrop., 10, 1.

Lavelle C. L., 1978, *An analysis of molar tooth form*, Acta Anat., 100, 282.
Lindsey D., 1977, *The upper mid-line space and its relation to the labial fraenum in children and in adults*, Brit. Dent. J., 143, 327.
Ménard J., 1975, *L'evolutions des dents des françaises*, Bull. mém. Soc. Anthrop. Paris, 2, 45.
Papreckienė I., G. Česnys, 1978, *Litovcy Kapsukskogo i Zarasaiskogo rajonov s točki zrenija etničeskoj odontologii*, [in:] *Obščie zakonomernosti morfogeneza i regeneracii*, Kaunas, 55.
Portin P., L. Alvesalo, 1974, *The inheritance of shovel shape in maxillary central incisors*, Am. J. Phys. Anthrop., 41, 59.
Salivon I. I., 1971 - 1972, *Kraniologičeskije i odontologičeskije materialy po naseleniju Belorussii II tys. n.e. v sviazi s voprosami etnogeneza Belorusov*, Glasnik Antropološkog Društva Jugoslavije, 8 - 9, 159.
Salivon I. I., L. I. Tegako, A. I. Mikulič, 1976, *Očerki po antropologii Belorussii*, Minsk.
Sawyer D. R., 1976, *Morphological characteristics of the pre-Columbian dentition. I. Shovel-shaped incissors, Carabelli's cusp and protostylid*, MCV Quart., 12 (2), 54.
Townsend G. C., T. Brown, 1978, *Heritability of permanent tooth size*, Am. J. Phys. Anthrop., 49, 497.
Zubov A. A., 1977, *Odontoglyphics. The laws of variation of the human molar crown microrelief*, [in:] *Orofacial growth and development*, The Hague — Paris, 269.
Zubov A. A., 1968, *Odontologija. Metodika antropologičeskich issledovanij*, Moskva.
Zubov A. A., 1972, *Odontologičeskije dannyje po naseleniju Pribaltiki*, Sov. Etnogr., 1, 68.
Zubov A. A., 1973, *Etničeskaja odontologija*, Moskva.

Addresses of the authors:
Irena Papreckienė, Antakalnio 68 - 38, Vilnius 232 055
Lithuanian SSR
Gintautas Česnys, Antakalnio 95-15, Vilnius 232 040
Lithuanian SSR

ODONTOLOGIA LITWINÓW Z XIV - XVII WIEKU. I. ODONTOLOGIA ETNICZNA I ODONTOGLIFIKA

IRENA PAPRECKIENĖ I GINTAUTAS ČESNYS

Celem niniejszej pracy jest określenie typu odontologicznego Litwinów z XIV - - XVII w. Zbadano więc, zgodnie z metodyką antropologicznej odontologii, 568 czaszek kompletnych i 27 fragmentów z 29 cmentarzysk Litwy. Badany materiał pochodzi z XIV - XVII w. (tab. 1). Z uzyskanych danych odontometrycznych (M_{cor} i I_{cor}) wynika, że pod względem wielkości zębów należą oni do grupy mezodontnych (tab. 2). Cechą rzadko rejestrowaną w badanym materiale było międzykorzeniowe przedłużenie szkliwa na M^2 — 5 i 6 stopień jej wyrażenia stanowi zaledwie 5,8% (tab. 3). Wyliczone częstości cech odontologicznych w badanym materiale pozwalają na określenie typu odontologicznego Litwinów XIV - - XVII w. jako środkowoeuropejskiego. Świadczą o tym niskie częstości czteroguzkowych (2,56%) i sześcioguzkowych M_1 (1,28%), (tab. 4), fałdki kolankowatej metakonidu (1,49%) pierwszego (5,44%) oraz drugiego i trzeciego łącznie stopnia

(0,3%) łopatowatości siekaczy górnych I^1, rozsunięcia (*crowding*) (0,4%), redukcji górnego bocznego siekacza I^2 (w stopniach 2+3) (0,38%), trzeciej formy *1 pa* („lirokształtnej") na M^1 (5,63%), średniej częstości diastemy (8,46%), *2medII* na M_1 (25,0%) i wysokie częstości wzoru +5 na M_1 (48,57%). Podobne rezultaty uzyskano we wszystkich grupach (zachodniej, środkowej i wschodniej Litwie) określając je jako środkowoeuropejski typ odnotologiczny. Powyższe wyniki wskazują na homogenność typu odontologicznego na całym terytorium Litwy w XIV - XVII w.

14 - 17A. LIETUVIŲ ODONTOLOGIJA. I. ETNINĖ ODONTOLOGIJA IR ODONTOGLIFIKA

IRENA PAPRECKIENĖ IR GINTAUTAS ČESNYS

Darbo tikslas — nustatyti 14 - 17 a. lietuvių odontologinį tipa. Tam ištirta 568 sveikos ir 27 fragmentinės kaukolės, iškastos 29 uose 14 - 17 a. Lietuvos senkapiuose. Pagal odontologinių požymių kompleksą nustatyta, kad 14 - 17 a. lietuviai priklausė Vidurio Europos odontologiniam tipui.