

MACROCEPHALIC AND „AVAR PERIOD” MONGOLID ANTHROPOLOGICAL FINDS FROM WOIWODINA

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On the occasion of a study-tour in Yugoslavia in 1971 I had an opportunity for having a look of the anthropological materials of the museums in Woiwodina. In spite of the low number of the finds I managed to investigate some skeletons being of interest from the point of view of physical anthropology. In this short account I should like to describe three artificially deformed (macrocephalic) crania and two finds of „Avar-period” Mongolid type.

Description of the finds

In the collection of the Town Museum in Subotica there are two macrocephalic crania having been rescued by the archeologist L. SZEKERES. There are not any reliable data to determine their archeological ages. We shall give a detailed description of them as follows.

Find-spot: Subotica-Sándor Co-operative Home.

Date of discovery is probably 1950.

Cranium in very good state of preservation, age of death about 29 years. On the basis of the value -1.3 of the sexual coefficient (FARKAS-LENGYEL-MARCSIK, 1972) the cranium represents a hyperfeminine character, according to what we determined it as a female.

On the basis of absolute sizes the cranium is short (Fig. 1), narrow, high, oligencephalic, the forehead is narrow, the whole face and the upper face are high, mesognathous. According to the indices (Table 1) it is brachycranic, hypsicranic, acrocranic, metriometopic, hyperleptoprosopic, leptene, mesoconch, mesorrhine, mesostaphyline.

There is ossa Wormiana in the sut. lambdoidea. Though the aberration of the teeth has started, M_3 has developed only in the upper set of teeth. The upper link I_1 can be considered – in spite of the aberration – as shovel-shaped. The nasal bones are wide and they reach up high in the frontal bone. The cranium is plagiocephalic at the occipital region, as well as at the right pars lambdica and pars obelica of the sut. lambdoidea. At both sides from the middle line of the os frontale the bone is flat, and next to the sut. coronalis there is a well perceptible hollow in the occipital direction. At the occlusion of the teeth-curves opisthodontia can be observed.

The $g-l$ length is 147 mm, the basion-antibasion distance is 144 mm, the value of the index of deformation is 197.96, which represents – according

to the scheme of Oetkeking and Ginzburg-Žirov (LIPTÁK, 1961) – a macrocranic, that is moderately deformed cranium. On the basis of the basion-antibasion absolute size – according to the scheme of Ginzburg – the cranium is greatly deformed. Considering that the latest value, however, depends also on the taxonomical characteristics of the cranium, we think the conclusion made on the basis of the index is more acceptable.

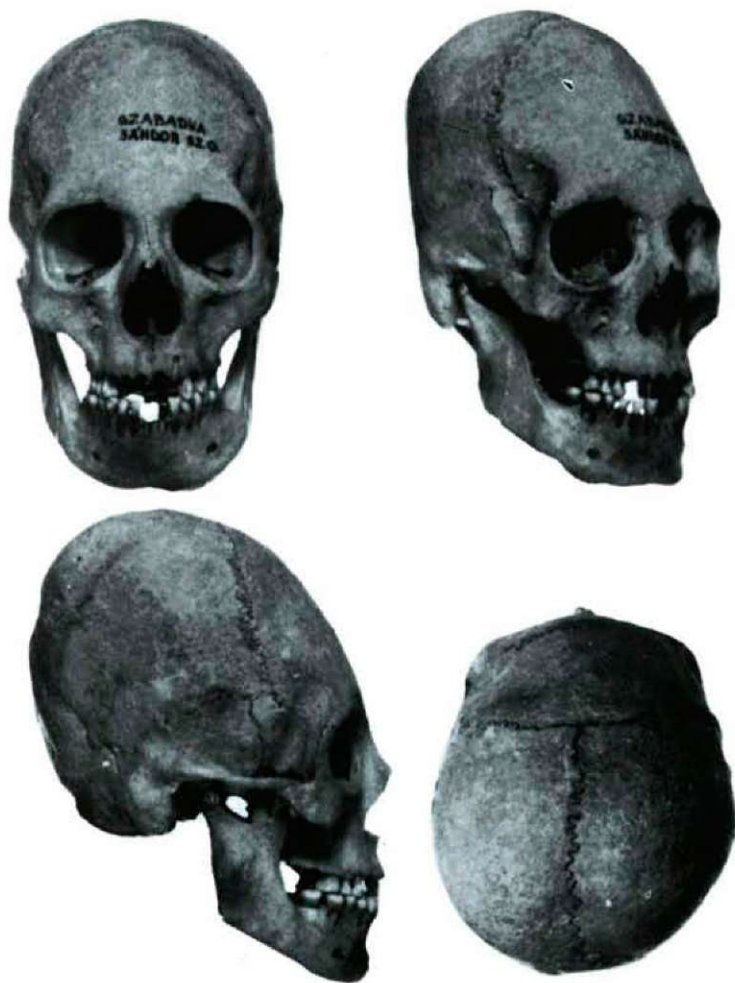


Fig. 1. Macrocephalic cranium of a female (Subotica—Sándor Co-operative Home)

Drawing conclusions from the morphological characteristics of the cranium, the deformation must have been a circular one having done by pressing down the frontal bone and the occipital bone with the aid of a flat object pushed a little bit to the right, then tying them up, but a binding must have been certainly also behind the sut. coronalis.

Table 1. Metrical and morphological characters of the finds

No. of measurements (Martin)	Subotica		Ada	Bačka Topola	
	Sándor Co-op. Home	Hussar-barrack		1.	2.
1.	154	153	171	187	174
1c.	143	152	162	175	167
5.	96	—	—	99	101
8.	127	140	146	147	141
9.	84	78	86	99	91
17.	138	—	—	137	128
20.	118	—	—	118	113
32a.	49	—	—	51	50
38.	1050	—	—	1467	1265
40.	92	—	—	102	101
45.	121	—	—	146	129
46.	96	72	—	110	109
47.	118	—	—	131	114
48.	72	—	—	78	73
51.	39	—	—	38	37
52.	32	33	—	32	32
54.	26	18	—	31	29
55.	53	39	—	51	52
62.	48	32	—	46	45
63.	39	30	—	42	42
65.	114	—	—	136	120
66.	98	—	—	103	97
69.	31	—	—	42	30
70.	58	—	—	72	62
71.	31	—	—	38	37
72.	81	—	—	81	85
8 : 1	82.5	91.5	85.4	78.6	81.0
17 : 1	89.6	—	—	73.3	73.6
17 : 8	108.7	—	—	93.2	90.8
9 : 8	66.1	—	58.9	67.4	64.5
47 : 45	97.5	—	—	89.7	88.4
48 : 45	59.5	—	—	53.4	56.6
52 : 51	80.1	—	—	84.2	86.5
54 : 55	49.1	46.2	—	60.8	55.8
63 : 62	94.8	93.8	—	91.3	93.3
N. vert.	—	—	—	Ov.	Pent.
Glabella	1	1	2	3	1
Sp. nas. ant.	2	3	—	1	1
Pr. occ. ext.	1	0	2	2	1
Progn. alv.	2	1	—	3	3
Fossa can.	3	1	—	2	1
Age	29	6	75	60	29
Sexualis.	-1.3	—	+1.5	+1.4	-1.0

The nasal bones reaching far up, the high corpus mandibulae, the shovel-shaped for-teeth all represent at least europo-mongolid characteristics from the point of view of race-diagnostics (LIPTÁK, 1971).

Find-spot: Subotica-Hussarbarack.

The find came to the light in 1963 and it is to be dated from the Avar period. Also this cranium is deposited in the Town Museum in Subotica.

Fragmentary calvarium in good state of preservation. As among the permanent teeth the eruption of M_1 has not been completed, the age of death concerning this find can be estimated at 6 years. Sex cannot be determined with absolute certainty.

On the basis of the indices the cranium (Fig. 2) is hyperbrachycranial and stenometopic.

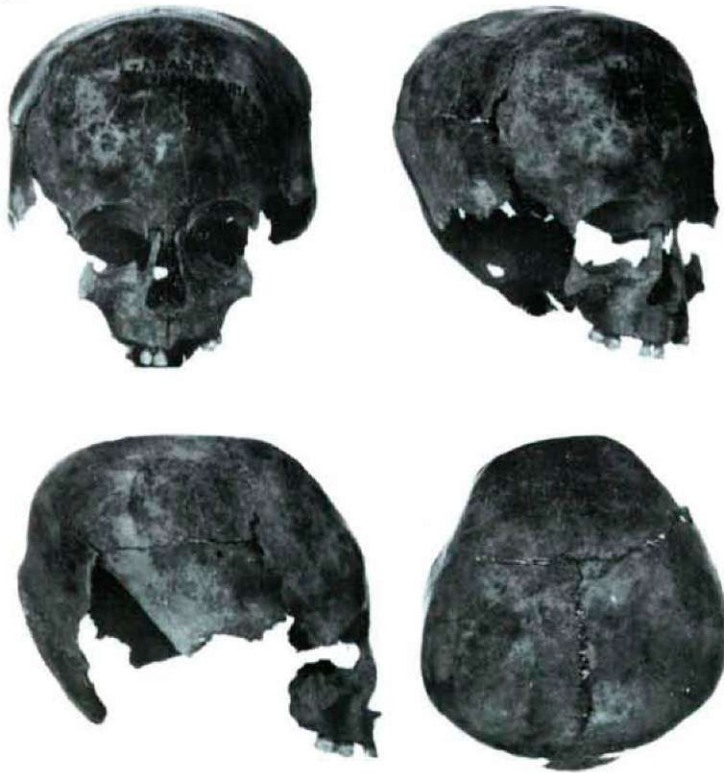


Fig. 2. Macrocephalic cranium of a child (Subotica—Hussarbarack)

Above the tubera frontalia, at the bregma-region, the region above the lambda-point and that being in lateral direction from both of the branches of the sut. lambdoidea the cranium is extremely flat. That is why the tubera parietalia, tubera frontalia and the region in front of the bregma are considerable protruding. The way the deformation was completed is very similar to that of the cranium from Ada that will be described as follows.

Being of interest from the point of view of paleopathology, there are cribra orbitalia at both of the orbits, which may represent the cause of death.

Find-spot: Ada.

There are not any exact archeological data concerning this find. At the present time the cranium is deposited in the Woiwodina Museum (Novi Sad), its rescue is owing to the archeologist S. NAGY.

The calvaria in question is one with extremely strong walls, in very good state of preservation (Fig. 3). On the basis of the grade of obliteration of the sutura the age of death can be estimated at 75 years. The sexual coefficient is



Fig. 3. Macrocephalic cranium of a male (Ada)

+ 1.5, that comes near to the complex of hypermasculine characteristics, so we determined it as a male.

On the basis of the absolute sizes, the cranium is short, medium wide, the forehead is narrow. According to the index it is hyperbrachyranic, stenome-topic.

In the sut. lambdoidea there is ossa Wormiana. The occipital bone is cone-shaped.

Its deformation seems to be more considerable, than that in case of the find having come to light at Subotica-Sándor Co-operative Home. There is a fairly big hollow to be observed through the forehead and the bregma-region, as well as under the protuberantia occipitalis externa. Also in this case the deformation must have been a circular one, completed, however, by a different method. One of the bindings must have been through the frontal bone and under the protuberantia occipitalis externa. As at both the sut. lambdoidea and the protruding occipital bone there are flattening to be observed, we suppose that in this place the cranium was pressed down by three flat objects.

Find-spot: Bačka Topola.

The rescue of the finds (number 1 and 2) from an authentic Avar cemetery is due to the archeologist L. SZEKERES. Since 16th August 1958 they have been deposited in the Museum of Subotica.

Find No. 1 is a cranium in very good state of preservation (Fig. 4), its age of death can be estimated at 60 years, and its sex – according to the masculine and hypermasculine characteristics – can be determined as a male.

On the basis of absolute characteristics the cranium is of medium length, medium breadth, medium high, aristencephalic, the forehead is medium wide, bizygomatic breadth is large, the whole face and the upper-face are high, mesognathous.

On the basis of indices it is mesocranic, orthocranic, metriocranic, metriometopic, mesoprosopic, mesene, mesoconch, hyperchamaerrhine, brachystaphyline.



Fig. 4. Mongolid cranium of a male (Bačka Topola, No. 1)

In the area of palatum durum, at both sides of sut. palatina torus sagittalis of medium size has been found.

The alveolar part of maxilla is high and a well developed sulcus praenalis can be felt. Great os epiptericum on the right pterion. Beneath the glabella supranasal remains of frontal bone. At the occlusion of the two rows of teeth there is psalidontia. The bones of the nose are relative wide and reach the area of os frontale.

As for taxonomy first of all Lipták's studies have been considered (LIP-TÁK, 1959), according to which it bears the characteristics of the Sinid race belonging to the Mongolid race.

Find No. 2. is a cranium of very good preservation. On the basis of its characteristics the age at death is approximated as 29, the sex - calculated with the - 1,0 sexual ratio - is female.

Regarding the absolute measures of the crane it is of medium length with hand height, the forehead is narrow, bizigomatic breadth of medium width, the whole face and upper face high, orthognathous.

From the indices it is brachyranic, orthocranic, tapeino- and stenome-opic, mesoprosopic, leptene, hypsiconch, chamaerrhine, brachystaphyline.

On the right side of the sut. palatina mediana there is a weak torus palatinus sagittalis. The nasal bones are sand-clock-shaped and they stretch up to the frontal bone.

Taxonomically, the find mostly comes near to the Central Asian type of the Mongolids.

Significance of the finds

In our opinion, two from the three macrocephalic finds show the same deformation of lesser degree (Subotica-Hussarbarack and Ada). In case of the third one (Sándor-Co-operative Home) a deformation of higher degree can be observed, completed by a different method. Accordingly, the finds can be divided into two groups.

There are a lot of macrocephalic find-spots we know in Hungary (PÁR-DUCZ, 1963), especially near the big rivers (Danube, Tisza, Körös). Most of the find-spots having been discovered near the Danube and the Tisza are determined as Hunnish, Gepid, furthermore, those near the Tisza as Avar or of any undetermined archeological period. Concerning our finds, that of Ada comes from a river region, whereas the finds of Subotica come from a farther district.

In Transdanubia, better to say near the Danube and along the Tisza two macrocephalic centres were formed in the migration period, differing from each other in respect of the deforming instruments and methods (NEMESKÉRI, 1952). In case of the deformed crania of the Gepid cemetery of Kiszombor (BARTUCZ, 1936) the method of deformation comes near to that of the find from Ada. The cranium of a male we have described comes near to the material of Kiszombor, respectively the method as well as that the deformation used to be a habit chiefly in males (19 from 21 males). At the same time in case of the cranium of a Gepid female from Tápé the method deformation (FARKAS-LIPTÁK, 1971) comes near to that of the find of a female from Sándor Co-operative Home at Subotica.

From the point of view of physical anthropology the macrocephalic finds in Hungary were described by LIPTÁK in detail. He drew attention to that most of the finds are of Europid character (LIPTÁK, 1961). At the same time the crania from Kiszombor show some Mongolid influence, that is why, in spite of their archeological material being a typical Germanic one, they are supposed to belong rather to a series of any Hunnish population (LIPTÁK, 1961). In case of the well preserved find of Subotica we are inclined to reveal, in addition to the predominance of Europid character, a very slight Mongolid influence, too.

Taking all these into account, we think that, though there are also some macrocephalic find-spots from the late Roman as well as the Hunnish periods in southern part of the area between the Danube and the Tisza, from the point of view of physical anthropology still our finds of undetermined archeological period can be connected chiefly with the Gepids. They are of importance first



Fig. 5. Mongolid cranium of a female (Bačka Topola, No. 2)

of all because they give some new data referring to the macrocephalic find-spots in southern part of the area between the Danube and the Tisza.

The other two crania enrich the row of Avar series containing Mongolid components. Naturally, the proportion of the Mongolid elements in the cemetery cannot be determined at the present time. The cemeteries excavated between the Danube and the Tisza (LIPTÁK, 1959) – which include Mongolids, too –, as for instance the cemeteries of Madaras, Úllő I, Kiskőrös, appear to have been followed by some more find-spots in Jugoslavia (Čik, Bačka Topola).

At the moment the two Mongolid finds are important from the point of view of taking into account cemeteries like these. The complete anthropological evaluation of the Avar series seeming to be of importance – which both of the crania belong to – is possible only by means of an excavation of a larger extent.

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