

THE LATE ROMAN NECROPOLIS BELJNJAČA IN ŠID ANTHROPOLOGICAL ANALYSIS

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Abstract: The aim of this study was the anthropological analysis of seven individuals from Late Roman period which were excavated in necropolis in Šid. Skeletal remains were incomplete, fragmentary and decomposed, so we couldn't manage to determinate sex and age of each individual (one senilis male, one maturus male, one adult male, one maturus female, two adult females, and one juvenilis I, unknown sex). To get a complete antropological picture of buried individuals, detailed descriptions of individual skeletal remains for each grave were given. The description comprehended: preservation and completeness of skeletal remains, sex and age estimation, stature estimation, paleopathological finds, nonmetric skeletal traits and skeletal markers of occupational stress. Dental analysis showed presence of caries, attrition, and periodontal disorders. A careful observation of skeletal remains demonstrated that these deceased suffered of joint diseases and hematological disorders. In consideration of all these real existences these people buried here, were health and led a quiet and wealthy life.

Key words: Late Roman period, necropolis, sarcophagus, possible biological family, aDNA.

The article results from the project: *Urbanization and Transformation of the City Centers of Civil, Military and Residential Character in the Region of the Roman Provinces Moesia, Pannonia, Dalmatia* (no 147001) funded by the Ministry of Science and Technological Development of the Republic of Serbia.

On 14th November in 1997, on property of Željko Kovačević (Mičurinova Street, No 29) in part of Šid called Beljnjača, a stone sarcophagus, from 4th century was discovered by the merest accident. Team of experts from Art gallery "Sava Šumanović" in Šid and from Institute for the protection of cultural monuments in Sremska Mitrovica found that the cover of sarcophagus had been destroyed (probably during the robbery) and decided to collect bones which were laid next to sarcophagus (figs. 1-3). Soon after, these bones were sent to Museum of Srem in Sremska Mitrovica.

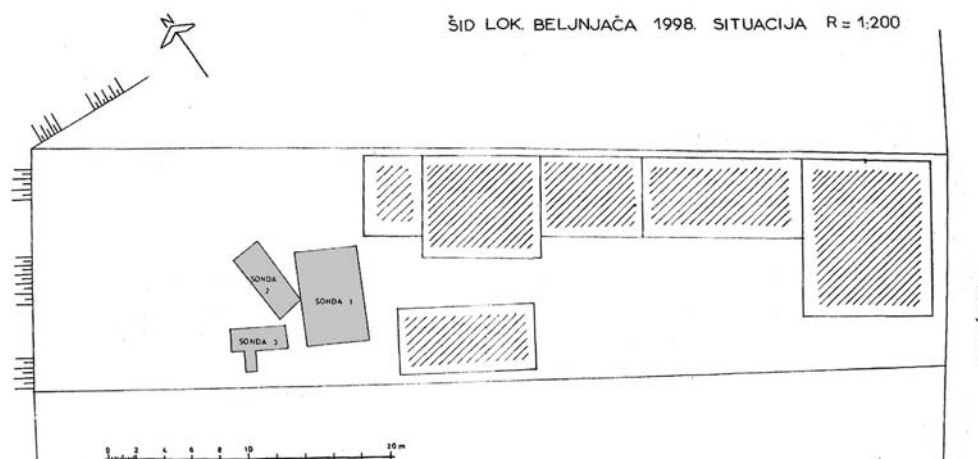
Since this was a significant find, team of experts from Archaeological institute and National Museum in Belgrade, with colleagues from Šid and Sremska Mitrovica decided to start an archaeological excavation by opening three sondes on that location on 5th May in 1998 (see the S. Pop-Lazić's article in these Volume of Starinar).¹ During the investigation, seven individuals from 4th century were excavated (from sonde 1: male, 45+ years old, adult female, unknown age and juvenilis I, unknown sex, 15-18 years old; sonde 1, SW

¹ I am grateful to director V. Burojević and her colleagues S. Garunović, Lj. Pantić and R. Sremac from Art gallery "Sava Šumanović" in Šid for help, discussions and access to osteological material and archaeological documentation. I also own special thanks to dr S. Stefanović who gave me permission to use her anthropological analysis and data of Grave 2 (accomplished few years ago), M. Jesretić for photograph of sarcophagus (fig. 3) and M. Radmilović for technically adapted all photographs and plans.

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Fig. 1. Necropolis Beljњаča in Šid, situation plan

Сл. 1. Некропола Бељњача у Шиду, ситуациони план



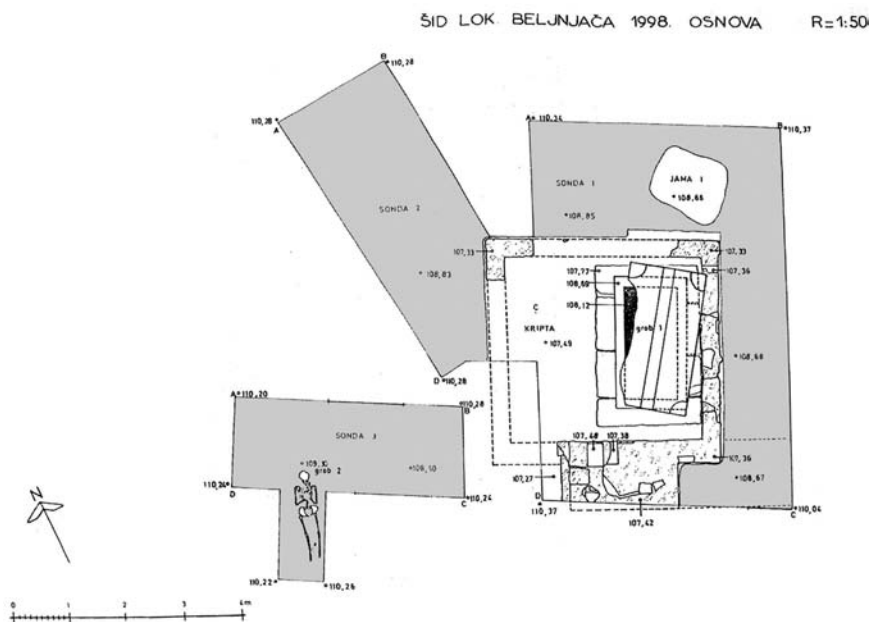
part, nearly B-C profile: adult male, unknown age and adult female, unknown age; destruction layer of crypt: male, 60+ years old; sound 3: female, 40-60 years old (figs. 1-4).

to bad state of preservation, anthropological methods used during the investigation of these remains were limited and separated in two groups:

a) Methods for sex determination

Fig. 2. Necropolis Beljњаča in Šid, base and position of graves

Сл. 2. Некропола Бељњача у Шиду, основа са положајем гробова



The anthropological analysis of each skeleton began with a description of the conditions of the find and establishment the degree of bones preservation. After that, the skeletal remains were subjected to further anthropological study consisting of the identification of the sex, age and height of each of the skeletons, of morphological and metrical elements, of cranial and postcranial indices, dental and pathological analysis, observation of markers of occupational stress and other traits. Since the bones were in bad state of preservation, some were very fragmented and decomposed, the examination of sex and age was very difficult. Due

Sex was determined by using the combination of morphological and metrical methods. Special attention was attracted on morphological and metrical elements on skull following the standards and criteria as outlined by European anthropologists,² Buikstra and Ubelaker.³ During the analysis of postcranial bones, morphological and metrical elements were examined, too. Morphological elements such as degree of development of *tuberositas deltoideae*, *linea aspera* and

2 Ferembach, Schwidetzky and Stloukal 1980: 519-527.
3 Buikstra and Ubelaker 1994: 15-21

tuberositas tibiae were selected. Metrical elements were studied in a way that Ferembach and his colleagues⁴ and Bass⁵ recommended. Since the metrical elements on postcranial bones play the significant part

in sex estimation, all measurements of each skeleton were shown in Tables 1 and 2 and

4 Ferembach, Schwidetzky and Stloukal 1980: 519–527.

5 Bass 1987: 80.

Table 1 Measurements and indices of postcranial skeletons

Табела 1 Мере и индекси на постранијалном скелећу

| POSTCRANIAL SKELETON I (cm) | G-1 I IND. | G-1 II IND. | G-1 III IND. | D. B. I I IND. | D. B. I I IND. | D. B. II | G-2 |
|----------------------------------|------------|-------------|--------------|----------------|----------------|----------|--------|
| CLAVICLE* | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |
| Circumference at middle of bone | - - | - - | - - | - - | 3.7 - | - - | - - |
| Claviculohumeral Index | - - | - - | - - | - - | - - | - - | - - |
| Robustness Index | - - | - - | - - | - - | - - | - - | - - |
| HUMERUS* | | | | | | | |
| Maximum length | - - | 28 - | - - | - - | - - | - - | - - |
| Maximum diameter midshaft | - - | 2 - | - - | - - | - - | - - | - - |
| Minimum diameter midshaft | - - | 1.65 - | - - | - - | - - | - - | - - |
| Maximum diameter of the head | - - | 4.1 - | - - | - - | - - | - - | - - |
| Least circumference of the shaft | - - | 5.6 - | - - | - - | - - | - - | - - |
| Biepicondylar width | - - | - - | - - | - - | - - | - - | - - |
| Articular width | - - | 3.85 - | - - | - - | - - | - - | - - |
| Robusticity Index | - - | 20 - | - - | - - | - - | - - | - - |
| Radiohumeral Index | - - | - - | - - | - - | - - | - - | - - |
| RADIUS* | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |
| ULNA* | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |
| Physiological length | - - | - - | - - | - - | - - | - - | - - |
| Least circumference of the shaft | - - | - - | - - | - - | - - | - - | - - |
| Caliber Index | - - | - - | - - | - - | - - | - - | - - |

Table 2 Measurements and indices of postcranial skeletons

Табела 2 Мере и индекси на постранијалном скелету

| POSTCRANIAL SKELETON II (cm) | G-1 I IND. | G-1 II IND. | G-1 III IND. | D. B. I I IND. | D. B. I I IND. | D. B. II | G-2 |
|---|-------------|-------------|--------------|----------------|----------------|----------|--------|
| FEMUR* | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |
| Anterior-posterior diameter of the midshaft | 2.9 2.9 | 2.6 - | - - | - 3.1 | - - | - - | - - |
| Mediolateral diameter of the midshaft | 2.95 3 | 2.5 - | - - | - 2.9 | - - | - - | - - |
| Maximum diameter of the head | 4.7 4.75 | - - | - - | - - | - - | - - | - - |
| Circumference of the midshaft | 9.4 9.5 | 7.8 - | - - | - 9.2 | - - | - - | - - |
| Bicondylar width | - - | - - | - - | 8.25 8.2 | - - | - - | - - |
| TIBIA* | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |
| Anterior-posterior diameter at the nutrient foramen | - - | - - | - - | - - | - - | - - | - - |
| Mediolateral diameter at the nutrient foramen | - - | - - | - - | - - | - - | - - | - - |
| Circumference at the nutrient foramen | - - | - - | - - | - - | - - | - - | - - |
| Proximal breadth | - - | - - | - - | - - | - - | - - | - - |
| Distal breadth | - 5.6 | - - | - - | - - | - - | - - | - - |
| Platycnemic Index | - - | - - | - - | - - | - - | - - | - - |
| FIBULA*¹ | | | | | | | |
| Maximum length | - - | - - | - - | - - | - - | - - | - - |

b) Methods for age determination

Evaluation of age was established on the base of: *degree of suture closure*;⁶ *changes on teeth* (correlation of age at death was compared with molar wear);⁷ *the times of epiphyseal union* following the standards and criteria as outlined by European anthropologists;⁸ *morphological changes of sternal-end ossification of the ribs* (model standards of phases 0-8 (range 18-70

years) of sternal-end ossification of ribs was used)⁹ and *based on bone expression in fossa trochanterica*.¹⁰

6 Vallois 1937.

7 Brothwell 1965, 69; Lovejoy, 1985.

8 Ferembach, Schwidetzky and Stloukal 1980: 531.

9 Işcan, Loth and Wright 1984a; *ibid.* 1984b; *ibid.* 1985.

10 Šlaus 2006: 97.

PRESENTATION AND DISCUSSION OF SKELETAL REMAINS

SONDE 1

Grave 1, sarcophagus



Fig. 3. Necropolis Beljnjaja in Šid, sarcophagus from sound 1

Сл. 3. Некропола Бельњача у Шиду, саркофаг пронађен у сонди 1

Preservation and completeness of skeletal remains:

Cranial skeleton: 1 bone fragment of the skull 6.5 x 6.5 cm in size;

Postcranial skeleton: right humerus with post mortem destruction of distal end (II individual), 1 bone fragment of upper part of the left humerus without proximal end, 9 cm in length (III individual), right femur: almost completed in the upper 1/2 of the body and 1/3 of the lower 1/2 of the body (I individual), 2/3 of the upper part of the decomposed right femur (II individual), left femur: almost completed in the upper 1/2 of the body and 1/5 of the lower 1/2 of the body (I individual), 2 more bone fragments of both femurs, 7 and 12.5 cm in length (I individual), distal 1/3 of the left tibia (I individual), left fibula without ends and distal end of the same bone (I individual), proximal end of the left (?) fibula (II individual), 7 bone fragments of postcranial skeleton 3.5-5.5 cm in length (I, II and III individual), 1/3 of the left scapula (a part of the bone around glenoid cavity) and 2 more bone fragments, 4 and 5 cm in length (III individual), 2/3 of the atlas (I individual), 1 decomposed lumbar vertebra (III individual), 15 bone fragments of the ribs (I, II and III individual), II left os metacarpale (III individual), III left os metacarpale (III individual), 2 phalanges (ossa digitorum) (III individual), V right os metatarsale (I or II individual).¹²

Sex and age:

- I individual: maturus, male, 45+ years old;
- II individual: adult, female, unknown age and

III individual: juvenilis I, unknown sex, 15-18 years old (figs. 1-3; tables 1 and 2; Plate IV–fig. 1 and 2).¹³

Stature:

II individual: 152 ± 4 cm.¹⁴

Paleopathological finds:

Joint diseases:

I individual: upper ends of femurs shown osteoarthritis on their joint surfaces (Plate I – figs. 1 and 2). Lengthwise both *linea aspera-s* marginal osteophytes were present (Plate I – fig. 3). Along muscle attachment sites in upper 1/2 of the left fibula (*m. peroneus longus*, *m. extensor hallucis longus* and *m. flexor hallucis longus*) marginal osteophytes were detected.

II individual: head and lower end of the right humerus shown osteoarthritis on its joint surfaces (Plate III – figs. 1-3). Along muscle attachment sites in upper 1/2 of the right humerus (*m. pectoralis major*, *m. deltoideus* and *m. triceps brachii*) marginal osteophytes were present (Plate III – figs. 1-3).

11 Bones marked with * have two measurements - upper is for the right, and lower is for the left side of the body.

12 123 animal bone fragments, 0.5-20 cm in length were found nearly the sarcophagus.

13 It is possible that these three persons, buried in sarcophagus, were members of one biological family (father, mother and child). We took samples of each individual for a DNA (ancient DNA) analysis (Pl. II – fig. 3; Pl. III – fig. 4; Pl. IV – fig. 4). aDNA results will show that these persons were/ or were not members of the same biological family.

14 The stature of the skeleton was estimated using the formulae of Trotter and Gleser (1952).

Since these persons were categorized as maturus and adult, and osteoarthritis wasn't seen in a high prevalence and specific patterning, it might be possible to suggest that the age induced osteoarthritis for this individuals.¹⁵ The disease is, otherwise, the most common form of joint pathology and is usually detectable during the fourth decade of life.¹⁶

Hematological disorders:

III individual: traces of deepen lesions, 2 x 1 cm in size, were present on the left humerus in upper ½ of the body (Plate IV – fig. 3).

Nonmetric skeletal traits:

I individual: on atlas *facies articularis superior atlantis bipartita* (Plate II – fig. 1) and on both femurs *trochanter tertius* were perceived (Plate – figs. 1-3).

Skeletal markers of occupational stress:

I individual: these features which were discovered on one bone fragment of the rib included hypertrophy (cortical defects) of muscle attachment sites for *m. pectoralis minor*, *m. pectoralis major*, *m. serratus anterior*, *Mm. levatores costarum brevis*, *Mm. levatore costarum longi* (Plate II – fig. 2). Although, unfortunately, other bones of upper limbs (specially those involved in shoulder joint) were missing, we could assumed that they would had the same cortical changes.

SONDE 1, SW part, nearly B-C profile

Dislocated bones I

Preservation and completeness of skeletal remains:

Postcranial skeleton: lower end of right femur (I individual), lower ½ of the left femur and 1 more bone fragment of femur (?), 13.5 cm in length (I individual), demaged upper end of the left tibia and 1 more fragment of the same bone (I or II individual), 20 bone fragments of postcranial skeleton 0.1-2 cm in length (I and II individual), decomposed lateral 1/2 of the right clavicle (II individual) (figs. 1 and 2).¹⁷

Sex and age:

I individual: adult, male, unknown age and

II individual: adult, female, unknown age (figs. 1 and 2; tables 1 and 2).

Paleopathological finds:

Joint diseases:

I individual: slight traces of osteoarthritis were discovered on tuberositas of the left tibia.

Since this persons was categorized as adults, and osteoarthritis wasn't seen in a high prevalence and specific patterning, it might be possible to suggest that the age induced osteoarthritis for this individual, too.¹⁸

Skeletal markers of occupational stress:

I individual: these features which were discovered on the posterior side of lower end of the right

femur included hypertrophy (cortical defects) of muscle attachment sites for *m. adductor magnus*, *m. gastrocnemius – Caput laterale* and *mediale*.¹⁹

DESTRUCTION LAYER OF CRYPT

Dislocated bones II

Preservation and completeness of skeletal remains:

Cranial skeleton: glabellar region of the frontal bone, 1/3 of the right parietal bone, 2/3 of the left parietal bone, 7 bone fragments of the occipital bone 2-8 cm in length, 5 bone fragments of the skull 2-4.5 cm in length.

Postcranial skeleton: 1 bone fragment of postcranial skeleton 8 cm in length, left calcaneus, II right os metacarpale without upper end, IV right os metacarpale, decomposed right os naviculare, 1 bone fragment of the rib.²⁰

Sex and age: male, 60+ years (figs. 1 and 2; tables 1 and 2).

Paleopathological finds:

Joint diseases:

I individual: slight traces of osteoarthritis were discovered on left calcaneus.

Since osteoarthritis wasn't seen in a high prevalence and specific patterning, it might be possible to suggest that the age induced osteoarthritis for this individual.²¹

SONDE 3

Grave 2

Preservation and completeness of skeletal remains:

Cranial skeleton: only 4 bone fragments of the skull 2.5-5 cm in length were available for anthropological investigation (figs. 1, 2 and 4).²²

Sex and age: female, 40-60 years old.²³

Paleopathological finds were not found.

15 Šlaus 2006: 97.

16 Aufderheide, Rodríguez-Martín and Langsjoen 1998, 93.

17 4 animal bone fragments, 6-19.5 cm in length were found nearby.

18 Šlaus 2006: 97.

19 These patterns of markers of occupational stress are attributed to horseback riding (Reinhard *et al.*, 1994).

20 30 animal bone fragments, 6-19.5 cm in length were found nearby.

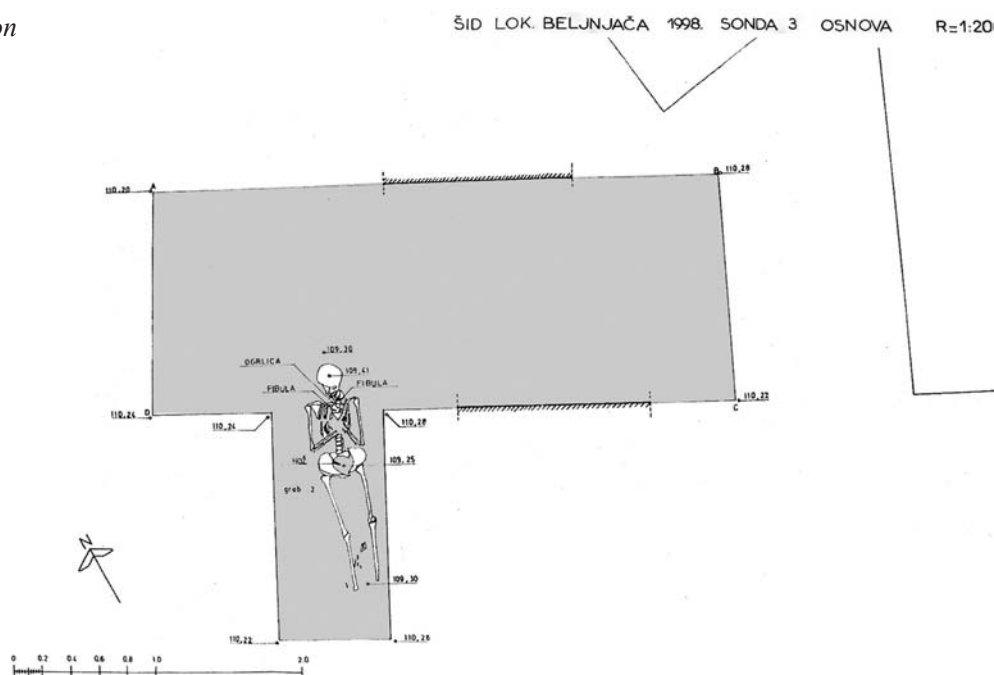
21 Šlaus 2006: 97.

22 3 animal bone fragments, 2-11 cm in length were found nearby.

23 S. Stefanović was already analyzed this skeleton few years ago. These skull parts, here, belonged to the skeleton from the grave 2 and were probably left, by chance, in Art gallery "Sava Šumanović" in Šid. S. Stefanović estimated sex and age of this individual due to relatively completed and preserved cranial and postcranial skeletal material. The stature of the skeleton was estimated using the formula of Pearson (154.5 cm). Teeth showed attrition of III (bare dentin up to pulp cavity) and IV (open pulp cavity) degree, ante mortem loss of teeth, caries and periodontal disease (Pl. V – fig. 1). On manubrium and on left clavicle traces of green colour were perceived (Pl. – fig. 2).

Fig. 4. Grave 2 - skeleton
of the deceased

Сл. 4. Гроб 2 - скелет
покојника



CONCLUSION

The intent of this study was the anthropological analysis of seven individuals, three males, three females and one juvenilis unknown sex, from Late Roman period which were buried in necropolis Beljnjača in Šid and excavated during archaeological investigation in 1997. and 1998.

Dental analysis shown presence of caries, attrition, and periodontal disorders. A careful observation of skeletal remains demonstrated that these deceased suffered of joint diseases and hematological disorders.

Since not one of these pathological changes couldn't be the cause of death, we could say that they

probably died from natural causes. In consideration of all these real existences (the way that they were buried (some of them were buried in sarcophagus (grave 1), relatively long life, absence of serious diseases and slight traces of skeletal markers of occupational stress) these people, buried here, were health and led a quiet, peaceful and wealthy life.

However, such a small sample, together with small number of measurements and indices, was far from sufficient for more serious comparison. We hope that further archaeological and anthropological examinations of this necropolis from Late Roman period will provide more perspicuous picture of this period in our country.

BIBLIOGRAPHY

Aufderheide, Rodríguez-Martín and Langsjoen 1998 – A. C. Aufderheide, C. Rodríguez-Martín and O. Langsjoen, *The Cambridge Encyclopaedia of Human Paleopathology*, Cambridge 1998.

Bass 1987 – W. M., Bass, *Human Osteology, A Laboratory and Field Manual*, Columbia 1987.

Brothwell 1965 – D. R. Brothwell, *Digging up bones*, Ithaca, 1965.

Buikstra and Ubelaker 1994 – J. E., Buikstra and D. H., Ubelaker, *Standards for data collection from human skeletal remains*. Arkansas Archaeological Survey Research Series, No 44. Fayetteville, Arkansas 1994.

Ferembach, Schwidetzky and Stloukal 1980 – D., Ferembach, I., Schwidetzky and M., Stloukal, Recommendations for age and sex diagnosis of skeletons. *Journal of Human Evolution* 7, 1980, 517–549.

Işcan, Loth and Wright 1984a – M. Y. Işcan, S. R. Loth and R. K. Wright, Metamorphosis at the sternal rib: A new method to estimate age at death in males, *American Journal of Physical Anthropology* 65, 1984, 147–156.

Işcan, Loth and Wright 1984b – M. Y. Işcan, S. R. Loth and R. K. Wright, Age estimation from the rib by phase analysis: White males, *Journal of Forensic Sciences* 29, 1984, 1094–1104.

Işcan, Loth and Wright 1985 – M. Y. Işcan, S. R. Loth and R. K. Wright, Age estimation from the rib by phase analysis: White females, *Journal of Forensic Sciences* 30, 1985, 853–863.

Lovejoy 1985 – C. O. Lovejoy, Dental Wear in the Libben Population: Its functional pattern and role in the determination of adult skeletal age at death, *American Journal of Physical Anthropology* 68 (1), 1985, 47–56.

Reinhard et al. 1994 – K. J., Reinhard, L. Tieszen, K. L. Sandness, L. M. Beiningen, E. Miller, A. M. Ghazi, C. E. Miewald and S. V. Barnum, Trade, contact, and female health in northeast Nebraska. *In the Wake of contact: Biological Responses to Conquest*, 63-74, ed. C. S., Larsen, and G. J. Milner, New York 1994.

Šlaus 2006 – M. Šlaus, *Bioarheologija – Demografija, zdravlje, traume i prehrana starohrvatskih populacija*, Zagreb 2006.

Trotter and Gleser 1952 – M. Trotter and G. C. Gleser, Estimation of stature from long bones of American whites and Negroes, *American Journal of Physical Anthropology* 10, 1952, 463–514.

Vallois 1937 – H. W. Vallois, La Durre de la vie chez l'Homme fossile, *L'Anthropologie* 47, 1937, 499–532.

Резиме

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КАСНОАНТИЧКА НЕКРОПОЛА БЕЉЊАЧА У ШИДУ АНТРОПОЛОШКА АНАЛИЗА

Кључне речи: Касна антика, некропола, саркофаг, могућа биолошка сродност, дДНК.

Током заштитних археолошких истраживања 1997. и 1998. на локалитету Бељњача у Шиду, откривен је део касноантичке некрополе, датоване у 4. век (види чланак С. Поп-Лазиха у овом броју Старинара). Антрополошком анализом смо обухватили укупно седам особа: скелетни остаци три особе пронађени су 1997. непосредно уз саркофаг оштећен пљачком (гроб 1), а остаци још четири особе пронађени су 1998. године; пол је остао непознат у случају једне јувенилне особе, а код осталих је утврђен, то су три мушкарца и три жене (сл. 1-4; Табле I-V).

Поред описаних метода за утврђивање полне припадности и индивидуалне старости, детаљно су антрополошки анализирани скелетни остаци, што подразумева: утврђивање степена очуваности костију, полне и старосне припадности (Табла IV – сл. 1 и 2), телесне висине, морфолошких и метричких елемената на кранијалном и посткранијалном скелету (Табеле 1 и 2), затим палеопатолошке налазе (Табла I, Табла III – сл. 1-3, Табла IV – сл. 3), епигенетске карактеристике (Табла I – сл. 1-3, Табла II – сл. 1), маркере

окупационог стреса (Табла II – сл. 2) и узимање узорка за анализу ДНК индивидуа из гроба 1 (Табла II – сл. 3, Табла III – сл. 4, Табла IV – сл. 4) у циљу испитивања њихове међусобне сродности.

Анализа зуба је показала присуство каријеса, абразије и пародонтопатије (Табла V – сл. 1). На скелетним остацима уочени су трагови остеоартритиса и промена на костима узрокованих крвним поремећајима. Међутим, ниједна од ових болести, појединачно, није могла да буде директан узрок смрти ових индивидуа. Посматрајући податке добијене антрополошком анализом, можемо закључити да су оне умрле вероватно природном смрћу, а уколико се узму у обзир још неке чињенице (начин на који су нпр. индивидуе из гроба 1 сахрањене, релативно дуг животни век и одсуство озбиљнијих обољења и маркера окупационог стреса) и да су имале здрав и квалитетан живот.

На крају остаје једино нада да ће нам наставак ископавања на овом локалитету пружити више информација о касноантичком становништву у том делу Срема.



Plate I – Fig. 1–3 (right and left femurs: trochanter tertius on both femurs; osteoarthritis on upper ends and marginal osteophytes along both linea aspera-s)

Табла I – Сл. 1–3 (десни и леви фемур: trochanter tertius на оба фемура; остеоартритис на горњим крајцима и остеофити дуж lineae asperae)



1



2



3

Plate II – Fig. 1–3 (1 facies articularis superior atlantis bipartita; 2 one bone fragment of the rib with hyperthrophy (cortical defects) of muscle attachment sites; 3 samples for aDNA analysis)

Табла II – Сл. 1–3 (1 фасијс артикуларис суперјор атлантис бипартита; 2 фрагмент ребра са хипертрофијом (кортикални дефекти) мишићних хваљшица; 3 узорци за дДНК анализу)



Plate III – Fig. 1–4 (1–3 osteoarthritis on head and lower end of the right humerus; marginal osteophytes along muscle attachment sites in upper 1/2 of the right humerus; 4 samples for aDNA analysis)

Табла III – Сл. 1–4 (1–3 остеоартритис на глави и доњем крајку десној хумеруса; остеофити дуж мишићних хвајшица у горњој 1/2 тела десној хумеруса; 4 узорци за гДНК анализу)

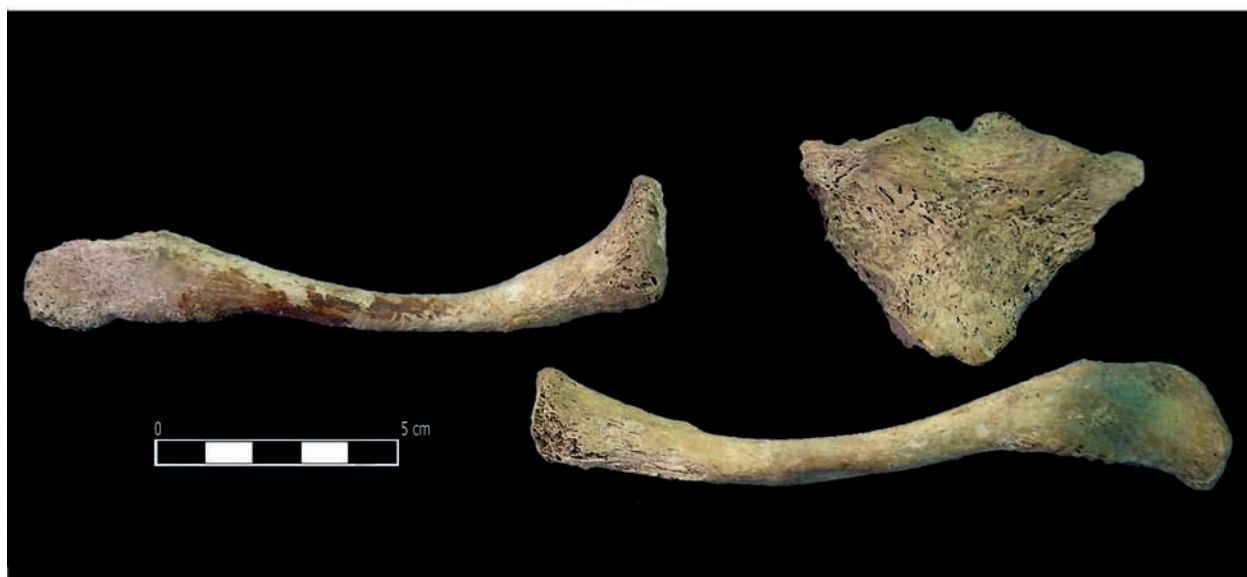


Plate IV – Fig. 1–4 (1 and 2 ossification of the left scapula wasn't finished; 3 traces of deepen lesions on the left humerus in upper 1/2 of the body; 4 samples for aDNA analysis)

Табла IV – Сл. 1–4 (1 и 2 осификација није завршена на левој скапули; 3 трагови дубљих лезија на левом хумерусу у горњој 1/2 тела; 4 узорци за гДНК анализу)



1



2

Plate V – Fig. 1 and 2 (1 ante mortem loss of teeth, attrition, caries and periodontal disease; 2 traces of green colour on manubrium and on left clavicle)

Табла V – Сл. 1 и 2 (1 заживошан губишак зуба, абразија, каријес и пародонтопатија; 2 трагови зелене боје на манубријуму и левој клавикули)