

DODATEK – BREZJE POD BRINJEVO GORO, SREDNJA BRONASTA DOBA

I. ANTROPOLOŠKA ANALIZA SKELETOV IZ GOMILE

Tatjana Tomazo-Ravnik

Analizirali smo štiri skelete, odkrite v gomili iz srednje bronaste dobe na Brezju pod Brinjevo goro.¹ V letih 1957 in 1958 sta kostne ostanke strokovno pregledala antropologinja Vida Brodar in stomatolog Vlado Wolf,² a celostni rezultati niso bili objavljeni.

Za bodoče raziskave so pomembni tudi podatki, kako je bilo kostno gradivo shranjeno, ko smo ga dobili v obdelavo. Nahajalo se je v treh škatlah. V prvi so bili drobni fragmenti štirih lobanj v plastičnih vrečkah. Ločeno so bili v vrečkah dve robustni spodnji čeljustnici in fragmenti zgornje čeljustnice. Prav tako so bili ločeno shranjeni lističi z oznako številke spodnje čeljustnice in lističi z obvestilom, da so čeljustnice z zobmi v obdelavi pri Valterju Krušiču. V drugi škatli smo ob prvem pregledu 15. 12. 2011 identificirali skeletne ostanke treh skeletov. Priloženi so bili označevalni lističi z različnimi oznakami. V tretji škatli so bili v šestih vrečkah skeletni ostanki s priloženimi lističi z različnimi oznakami.

S pomočjo opisov in slikovnega gradiva, ki jih prinaša S. Pahič v svoji objavi, in lističev, ki so spremljali gradivo, smo uspeli z veliko verjetnostjo sestaviti skelete iz grobov 2 do 5.³

Pregled in analize so bile opravljene po standardnih antropometrijskih in antroposkopskih metodah.⁴ Rezultati so bili detajlno predstavljani v poročilu,⁵ na tem mestu pa podajamo le povzetek naših ugotovitev.

¹ Pahič 1962–1963.

² Na vpogled mi je bilo gradivo Vide Brodar (1957?) z naslovom *Brezje pri Zrečah*. Vsebovalo je tipkopis obdelave (6 strani, brez datuma), tipkopis stomatološke obdelave Vlada Wolfa (2 strani, dne 30. 08. 1958) ter tri strani dopisov med Pokrajinskim muzejem Maribor (S. Pahič in B. Teplý med leti 1955 in 1957) in Vido Brodar.

³ Ker je pri nekaterih grobovih prišlo tudi do razhajanj med nekaterimi oznakami, to prinašamo kot opombe pri vsakem analiziranem skeletu.

⁴ Brothwell 1981; Bass 1987; Buikstra, Ubelaker 1994; Miladinović 2006; Blau, Ubelaker 2009.

⁵ Tomazo Ravnik 2012.

ADDENDUM – BREZJE BELOW BRINJEVA GORA, MIDDLE BRONZE AGE

I. ANTHROPOLOGICAL ANALYSES OF THE SKELETONS FROM THE TUMULUS

Tatjana Tomazo-Ravnik

This paper presents the results of the analysis of four skeletons from the Middle Bronze Age tumulus at Brezje near Brinjeva gora.¹ Skeletal remains were examined by anthropologist Vida Brodar and stomatologist Vlado Wolf as early as 1957 and 1958;² however, no comprehensive report has yet been published.

The storage conditions of the skeletal material used in this study may be pertinent to future research, and are described here. The bone assemblage was stored in three boxes. Within the first, small fragments of four crania were kept in plastic bags. Separate bags contained two robust mandibles and fragments of a maxilla. Also stored separately were a numbered label for a mandible, and a note that mandibles with teeth were sent to Valter Krušič for analysis. On the 15th of December 2011, the first inspection of the second box revealed skeletal remains of three individuals. Notes with different labels were also enclosed in the box. The third box contained six bags with postcranial remains and accompanying labels with notes.

The descriptions and illustrations by S. Pahič, and the notes accompanying the material, made it possible to accurately assemble skeletons from Graves 2 to 5.³

The overview and analyses of the skeletal material were performed by following standard anthropometric and anthroposcopic methods.⁴ Whereas detailed results were presented in the skeletal report⁵, this paper summarises its most important findings.

¹ Pahič 1962–1963.

² I was granted access to the report by Vida Brodar (1957?) titled *Brezje pri Zrečah*. It incorporated typescript of her skeletal analysis (6 pages without a date); Vlado Wolf's typescript of his stomatological analysis (2 pages dated 30.08.1958); and 3 pages of correspondence between S. Pahič and B. Teplý of the Regional Museum Maribor and Vida Brodar from the years 1955–1957.

³ As there were discrepancies between the labels for some of the graves, I include them all in the footnotes for each analysed skeleton.

⁴ Brothwell 1981; Bass 1987; Buikstra, Ubelaker 1994; Miladinović 2006; Blau, Ubelaker 2009.

⁵ Tomazo Ravnik 2012.

REZULTATI

Skelet 2⁶

Moški (stopnja seksualizacije je +1.68), matusus II (več kot 50 let).

Cranium

Lobanja je robustnega videza, v normi verticalis spheroidne oblike in v normi occipitalis hišaste oblike.

Mere na lobanji: največja dolžina – 18,3 cm, največja širina – 15,1 cm, bigonialna širina – 11,3 cm, bikondilarna širina – 12,9 cm, sprednja višina corpusa – 3,4 cm, kranialni indeks – 82,5 (brachyrania), index mandibule – 87,6, debelina lobanjske kosti: na mestu inion – 1,4 cm, tuber frontale – 0,6 cm, tuber parietale – 0,7 cm.

Os frontale – Nadočesni oboki so zelo močni, izrazita je tudi glabella. Rob orbite ima izrazit polkrožno oblikovan rob. Znaki, ki kažejo na stopnjo seksualizacije: glabella +2, arcus superciliaris +2, tubera frontalia 0, inclinatio frontale +1, margo supraorbitalis +2. Sutura coronalis je rahlo vidna le eksterno.

Os parietale – Oblikovanost obeh tuber parietalia 0. Sutura sagittalis ni vidna. Obe suturi squamozi vidni in nezarasli.

Os occipitale – Ohranjena je le squama occipitalis. Področje iniona je močno izraženo. Relief planum nuchale +2, protuberantia occipitalis externa +2. Sutura lambdoidea je rahlo vidna le eksterno.

Os zygomaticum – Robustnega videza. Izraženost +1.

Os temporale – Ohranjen le fragmenta pars petrosus.

Mandibula – Ohranjen je corpus, oba angulusa in ramus. Je zelo robustna +2. Področje gonionov ni izrazito izvihano, ima pa izražena narastišča žvekalnega mišičja +1. Obradek – mentum je močan +2. Spodnji rob corpusa je debel +2. Foramen mentale se nahaja med prvim in drugim praemolarjem. *Dentes* – Manjkata le oba prva inciziva. Ostali zobje so ohranjeni, vključno s tretjimi molarji. Obraba – abrazija je srednja do močna pri molarjih. Po Brothwelovi lestvici⁷ kaže na starost več kot 45 let.

Maxilla – Ohranjena sta levi in desni processus palatinus in processus alveolaris. Levi maxillarni sinus je delno ohranjen. *Dentes* – Desno – manjkata oba inciziva in drugi praemolar. Canin ima močno abrazijo, saj je vidna zobna pulpa. Na mestu prvega molarja je prisotna atrofija. Drugi molar ima posebno oblikovano obrabo grizne površine, ki je zelo intenzivna. Bukalna stran je višje ohranjena (5 mm) od lingvalne, ki je

⁶ Ostale oznake: Pahič – grob 2, Brodar – grob 2, Wolf – lobanja 4. Oznake na listkih: grob 2!, grob 2 VB4 (2?) ali prečrtana številka 2, skelet št. 4.

⁷ Brothwell 1981.

RESULTS

Skeleton 2⁶

Male (degree of sexualisation +1.68); matusus II (over 50 years).

Cranium

The cranium is robust. The vertical norm is spheroidal; the occipital norm resembles a house-like form.

Cranial measurements: maximum length – 18.3 cm; maximum width – 15.1 cm; bigonial width – 11.3 cm; bicondylar width – 12.9 cm; anterior corpus height – 3.4 cm; cranial index – 82.5 (brachyranic); mandibular index – 87.6. Thickness of the cranial bones: at inion – 1.4 cm; at frontal eminence – 0.6 cm; at parietal eminence – 0.7 cm.

Frontal bone – Supraorbital ridges are strongly pronounced, glabella is pronounced. The supraorbital margin is distinctly rounded. Characteristics for the degree of sexualisation: glabella +2; supraciliary arch +2; frontal eminences 0; frontal inclination +1; supraorbital ridge +2. Coronal suture is only discernible externally.

Parietal bone – Morphology of the parietal tubercles 0. Sagittal suture is unobservable. Both squamosal sutures are visible and open.

Occipital bone – Only the squamous portion is preserved. Area of the inion is strongly pronounced. Relief of nuchal plane +2; external occipital protuberance +2. Lambdoid suture is only discernible externally.

Zygomatic bone – Robust. Prominence +1.

Temporal bone – Only a fragment of the petrous portion is preserved.

Mandible – Both angles and ramus of the mandibular corpus are preserved. Very robust +2. While the gonial angle is not notably everted, the attachments for the mastication muscles are pronounced +1. Mental eminence is massive +2. Inferior border of the corpus is thick +2. Mental foramen is positioned between the first and second premolar. Dentition – Both first incisors are missing. The rest of the teeth are preserved, including third molars. Dental wear of the molars is medium to advanced. Brothwell's scale⁷ indicates age over 45 years.

Maxilla – The left and right palatine process and alveolar process are all preserved. The left maxillary sinus is only partially preserved. Dentition – Right: both incisors and second premolar are missing. Canine is highly abraded and the pulp is visible. Alveolus of the first

⁶ Other notes: Pahič – Grave 2; Brodar – Grave 2; Wolf – Cranium 4. Notes on the labels: Grave 2!; Grave 2 VB4 (2?); crossed out number 2; skeleton No. 4.

⁷ Brothwell 1981.

veliko nižja, kjer sploh ni več sklenine in je prisotna le korenina. Na lingvalni strani obeh drugih molarjev je na meji med krono in korenino viden karies. Tretji molar je izrasel, a ni ohranjen. Levo – ohranjena oba inciziva, canin in prvi praemolar. Na mestu drugega praemolarja je le alveola. Sledi atrofirani del in drugi molar ter alveola brez tretjega molarja. Drugi molar prav tako izkazuje posebno oblikovano grizno površino, kot je opisana pri desni strani. Tudi tu je abrazija srednja do močna.

Postcranium

Slabo ohranjen.

Vertebrae – 30 malih fragmentov corpusov in arcusov in fragment os sacruma.

Thorax – En fragment manubrium sterni.

Costae – 52 fragmentov corpusov costae (velikosti od 2 cm do 10 cm).

Ossa membri superioris

Scapula – Ohranjena leva in desna fragmenta cavitatis glenoidalis (višina 3,8 in 4,0 cm) in fragment spinae scapulae.

Clavicula – Desna – srednje izražena, cela z fragmentiranimi sklepnicama. Leva – fragment extremitatis acromialis z močnimi narastišči mišic.

Humerus – Desni – fragment caputa in corpora (33 cm) in fragment distalne epifize. Caput premer – 4,6 cm in obod corpora – 6,5 cm. Levi – fragment corpora (10,2 cm) in 1 fragment distalne epifize z fragmentom capitulum in trochlea.

Radius – Dva fragmenta, proksimalni del (2,3 cm) in distalni del (2,4 cm). Srednje močna.

Ulna – Desna – en manjši fragment proksimalne epifize – acromion. Leva – fragment proksimalnega dela in corpora (8,5 cm) z močnimi narastišči.

Manus – Ossa carpi: dve os capitatum, en os lunatum. Ossa metacarpi: pet (leva in desna tretja in trije fragmenti corpusov). Ossa digitorum manus: sedem proksimalnih, tri medialne in ena distalna phalanga.

Ossa membri inferioris

Os coxae – Del facies auricularis kaže znake starosti okoli 50 in 55 let z delom incisura ischiadice maior; oblika ni določljiva; sledov sulcus praeauricularis ni. Del cristae illiace kaže znake odrasle kosti. Del facies articularis acetabula (facies lunata). Del facies symphyseos os pubis kaže znake za starost, višjo od 50 let.

Femur – Levi – fragment corpora (30 cm), caputa in colluma, dva fragmenta condylusa. Linea aspera izrazita. Obod sredine corpora – 8,7 cm. Desni – fragment corpora (13,5 cm).

Tibia – En fragment osrednjega dela corpora (11,2 cm).

Fibula – En fragment corpora fibulae (14 cm).

molar is atrophied. The second molar has a specifically shaped and intensively abraded biting surface. The buccal side is significantly higher (5 mm) when compared to the lower lingual side, where the enamel is completely lost and only the root is preserved. On the lingual side of the second molar, caries is visible on the cervical line between the crown and the root. The third molar has erupted but is not preserved. Left: both incisors, canine and first premolar are preserved. Only the alveolus of the second premolar is preserved. It is followed by the atrophied alveoli of the first and second molars, and the alveolus of the third molar without the tooth. The second molar presents a specifically shaped biting surface, similar to that described for the right side. Likewise, this side of the maxilla has medium to advanced dental wear.

Postcranium

Poorly preserved.

Vertebrae – 30 small fragments of vertebral bodies and arches, one fragment of the sacrum.

Thorax – One fragment of the manubrium of the sternum.

Ribs – 52 fragments of the bodies of the ribs (varying from 2 cm to 10 cm in size).

Bones of the upper body

Scapula – Fragments of left and right glenoid cavity (height 3.8 cm and 4.0 cm), and one fragment of the scapular spine.

Clavicle – Right: medium built, completely preserved with fragmented medial and lateral ends. Left: one fragment of the acromial end with pronounced muscle attachments.

Humerus – Right: a fragment of the head and a diaphysis (33 cm), and a fragment of the distal epiphysis. The diameter of the head (4.6 cm) and midshaft circumference (6.5 cm). Left: a fragment of the diaphysis (10.2 cm) and one fragment of the distal epiphysis with partially preserved capitulum and trochlea.

Radius – Two fragments, a proximal end (2.3 cm) and a distal end (2.4 cm). Medium built.

Ulna – Right: one small fragment of the proximal epiphysis – acromion. Left: a fragment of the proximal end and a diaphysis (8.5 cm) with pronounced muscle attachments.

Hand – Carpal bones: two capitates, one lunate. Metacarpal bones: five (left and right third, and three fragments of the body). Hand phalanges: seven proximal, three medial and one distal.

Bones of the lower body

Pelvis – morphological characteristics of the partially preserved auricular surface indicate an age around 50 to 55 years. Also partially preserved is a greater sciatic

Pes – Ossa tarsi: dva fragmenta talusa (trochlea – 3,4 cm), en fragment calcaneusa, os cuneiforme media. Ossa metatarsi: štirje fragmenti in dve tretji, dve četrti in dve peti stopalnici. Ossa digitorum pedis: dve proximalni (palčevi) phalangi.

Skelet 3⁸

Ženski (stopnja seksualizacije je – 2.0), adultus (več kot 20 let).

Cranium

Kalota je zelo gracilna s podaljšanim zatilnim delom. Nadaljnjih 31 manjših fragmentov lobanjskih kosti nismo uspeli vključiti pri rekonstrukciji (velikosti od 0,5 cm do 4,0 cm).

Mere na lobanji: največja dolžina – približno 21,7 cm, največja širina – približno 11,5 cm, debelina na mestu tuber frontale – 0,3 cm, tuber parietale – 0,5 cm in iniona – 0,9 cm, kranialni indeks 52,9 (hyperdolichocrania).

Os frontale – Gracilna. Fragmentirana lateralno. Ohranjen le levi orbitalni del. Arcusi supracilliaris niso izraženi -2, glabella gladka -2, margo supraorbitalis oster -2, tubera frontalia 0, inclinatio frontale -2. Sutura coronalis lateralno vidna le eksterno, delno medialni del.

Os parietale – Desna in leva gracilni, fragmentirani. Sutura sagittalis rahlo obliterated interno, eksterno še vidna.

Os occipitale – Gracilna. Ohranjen le zgornji del squame. Protuberantia occipitalis externa -2. Sutura lambdoidea interno rahlo obliterated, eksterno dobro vidna.

Os zygomaticum – Fragmenta desne in leve – gracilna -2.

Mandibula – En fragment corpora mandibule z delno fragmentiranim angulusom (-1), brez ramusa. Pars alveolaris ima na mestu tretjega molarja atrofijo s še

notch, the form of which cannot be assessed. Preauricular sulcus is not present. Partially preserved iliac crest indicates bones of an adult. Partially preserved auricular surface of the acetabulum (the lunate surface). Morphological characteristics of partially preserved pubic symphysis indicate an age over 50 years.

Femur – Left: a fragment of the diaphysis (30 cm); a head and a neck, two fragments of the condyle. Linea aspera is pronounced. Midshaft circumference – 8.7 cm. Right: a fragment of the diaphysis (13.5 cm).

Tibia – One fragment of the middle part of the diaphysis (11.2 cm).

Fibula – One fragment of the diaphysis (14 cm).

Foot – Tarsal bones: Two fragments of talus (trochlea – 3.4 cm), one fragment of calcaneus, medial cuneiform. Metatarsal bones: four fragments and two third, two fourth and two fifth metatarsals. Foot phalanges: two proximal (first) phalanges.

Skeleton 3⁸

Female (degree of sexualisation -2.0); adultus (over 20 years).

Cranium

The cranial vault is very gracile with an extended occipital part. I was unable to incorporate 31 smaller fragments of the cranial bones (varying between 0.5 cm and 4.0 cm in size) into the reconstruction.

Cranial measurements: maximum length – approximately 21.7 cm; maximum width – approximately 11.5 cm; thickness at frontal tubercle – 0.3 cm; at parietal tubercle – 0.5 cm; and at inion – 0.9 cm; cranial index 52.9 (hyperdolichocrania).

Frontal bone – Gracile. Laterally fragmented. Only left orbital part is preserved. Supraciliary arches are not pronounced -2; glabella has a smooth contour -2; supraorbital ridge is sharp -2; frontal tubercles 0; frontal inclination -2. The lateral part of the coronal suture is only visible externally, and the medial part is only partially visible.

Parietal bone – Right and left, gracile and fragmented. The sagittal suture is slightly obliterated internally; externally it is still distinct.

Occipital bone – Gracile. Only the upper portion of the squamous part is preserved. External occipital protuberance -2. Internally, the lambdoid suture is slightly obliterated; externally it is still distinct.

Zygomatic bone – Fragments of the left and right bone – gracile -2.

⁸ Ostale oznake: Pahič – grob 3, Brodar – grob 3, Wolf – lobanja 3. Oznake na listkih: skelet št., VB: 3, skelet št. 3 = 4, VB: 3 (4?) ali prečrtana številka 4.

⁸ Other notes: Pahič – Grave 3; Brodar – Grave 3; Wolf – Cranium 3. Notes on the labels: Skeleton No. VB: 3; skelet No. 3 = 4; VB: 3 (4?); or crossed out number 4.

delno ohranjeno alveolo. Na mestu drugega molarja pa je popolna atrofija.

Maxilla – Dva ohranjena fragmenta. Levi in desni processus alveolaris z alveolami. Levo – ohranjen prvi inciziv brez abrazije. Sledijo delno ohranjene alveole do molarjev. Desno – ohranjen canin z rahlo abrazijo. Sledi atrofija do predela molarjev, ki niso ohranjeni oz. je ta del fragmentiran. Ohranjen je še en nedoločljiv praemolar s kariesom in srednjo abrazijo grizne površine.

Postcranium

Vertebrae – 22 drobnih fragmentov, trije fragmenti sacruma.

Costae – 38 fragmentov corpusov in dorzalnih delov.

Ossa membri superioris (vsi fragmenti zelo gracilni).

Scapula – Desna – fragment cavitas glenoidalis. Leva - cavitas glenoidalis (višina 3,4 cm) in še pet fragmentov.

Clavicula – Desna in leva – fragment extr. sternalis in corpora ter fragment extr. acromialis.

Humerus – Desni in levi fragmenti corpora (32, cm, 13,5 cm in 7,5 cm) ter mali fragment trochlee.

Radius – Fragment corpora (11,0 cm).

Ulna – Fragment corpora (19,5 cm) in še 13 fragmentov corpusov obeh kosti (3,5 cm do 9,0 cm).

Manus – Ossa metacarpi: štiri fragmenti.

Ossa membri inferioris (kosti so fragmentirane in zelo gracilnega videza)

Os coxae – Desna – fragmenti acetabula, tuber ossis ischii -2, del alae ossis ilii. Ohranjen del facies auricularis kaže površino za starost okoli 30 let. Incisura ischiadica zelo široka -2. Leva – fragment acetabula, allae ossis ilii. In še pet fragmentov allae ossis ilii.

Femur – Desni – fragment caputa in corpora (38 cm); subtrochanterno transv. -2,1 cm, sagitt. – 2,6 cm, index platymericus 123,8 – stenomeria, obod sredine diafize – 7,3 cm. Linea aspera nežna -2. Premer caput femurja – približno 3,9 cm. Fragment distalne diafize z facies patellaris. Levi – fragment corpora in distalnega dela (32,5 cm), fragment caputa. Približna dolžina stegenice, če kombiniramo obe je 40,0 cm.

Tibia – Trije gracilni fragmenti corpus tibiae (6,0 cm, 8,5 cm in 16,0 cm), dva fragmenta proksimalne epifize, fragment distalne epifize.

Fibula – Fragmenta corpora leve in desne (16,0 cm in 16,5 cm).

Pes – Fragment calcaneusa, fragment talusa (trochlea -2,8 cm) oba gracilna. Ossa metatarsi: levi in desni prvi in štiri nedoločljivi fragmenti.

Ohranjenih je še 25 fragmentov sten dolgih cevastih kosti (velikosti od 4,0 cm do 9,0 cm).

Mandible – One fragment of the mandibular body with partially fragmented angle (-1), ramus is not preserved. Dentition – At the position of the third molar, alveolar bone is atrophied with only a partially preserved alveolus. At the position of the second molar, alveolar bone is completely atrophied.

Maxilla – Two preserved fragments. Left and right alveolar processes with preserved alveoli. Dentition – Left: first incisor is preserved without any wear. It is followed by partially preserved alveoli all the way to the molars. Right: lightly abraded canine is preserved. It is followed by atrophied alveolar bone all the way to the molars, which are not preserved, due to bone fragmentation. An indefinable premolar is also preserved, with caries and medium wear on the biting surface.

Postcranium

Vertebrae – 22 small fragments, three fragments of the sacrum.

Ribs – 38 fragments of the bodies and dorsal ends.

Bones of the upper body (all the fragments are very gracile).

Scapula – Right: fragments of the glenoid cavity. Left: glenoid cavity (height 3.4 cm) and five other fragments.

Clavicle – Right and left: a fragment of the sternal end with the body and a fragment of the acromial end.

Humerus – Left and right fragments of the diaphyses (32.0 cm, 13.5 cm and 7.5 cm), and a small fragment of trochlea.

Radius – A fragment of the diaphysis (11.0 cm).

Ulna – A fragment of the corpus (19.5 cm) and 13 fragments of the left and right diaphyses (3.5 cm to 9 cm).

Hand – Metacarpals: four fragments.

Bones of the lower body (bones are fragmented and very gracile)

Pelvis – Right: fragments of the acetabulum; ischial tuberosity -2; part of the iliac wing. Morphological characteristics of the partially preserved auricular surface indicate an age of some 30 years. Greater sciatic notch is very wide -2. Left: a fragment of the acetabulum, iliac wing, and five fragments of the wing.

Femur – Right: a fragment of the head and diaphysis (38 cm); transverse subtrochanteric diameter – 2.1 cm; sagittal subtrochanteric diameter – 2.6 cm; platymeric index – 123.8; stenomeric, midshaft circumference – 7.3 cm. Unpronounced linea aspera -2. The diameter of the head – approximately 3.9 cm. A fragment of distal epiphysis with the patellar surface. Left: a fragment of the distal end of the diaphysis (32.5 cm); a fragment of the head. The approximate length of the femur, based on combining fragments of the left and right bones, is 40.0 cm.

Na osnovi meritev obeh femurjev in primerjave smo določili približno dolžino 40,0 cm. Po Manouvrierjevi tabeli⁹ bi bila domnevna telesna višina ženske v grobu 3 med 151,3 in 152,8 cm.

Skelet 4¹⁰

Ženski (stopnja seksualizacije je – 1.67), matusus I (med 40 in 50 let).

Cranium

Lobanja je gracilna. Dolge oblike.

Mere na lobanji: največja dolžina – približno 18,3 cm, največja širina – približno 12,8 cm, os frontale – coronalno – 10,8 cm in frontotemporalno 9,2 cm, debelina na mestu inion – 1,3 cm, tuber frontale – 0,6 cm in tuber parietale – 0,4 cm, kranialni indeks 69,9 (dolichocrania).

Os frontale – Arcus superciliaris poudarjena +1; levi močnejši, margo supraciliaris srednji 0, glabella gladka 0, tuber frontale izražen -1. Sutura coronalis interno zarasla, eksterno lateralno zarasla, medialno še rahlo vidna.

Os parietale – Desna – cela. Izraženost tubera -1. Leva – ohranjena le z zadnjo tretjino, ostalo ni ohranjeno. Tuber izražen -1. Sutura sagittalis rahlo vidna le eksterno, interno že obliterated.

Os zygomaticum – Fragment leve.

Os temporale – Fragmenta levega in desnega dela z pars petrosom in processus mastoideusom -1. Trije mali fragmenti squame in predela s fosso mandibularis.

Os occipitale – Ohranjen fragment zgornjega dela squame, ki je gladka, ohranjen pars basalis in del pars lateralis z levim condylusom. Sutura lambdoidea dobro vidna.

⁹ Manouvrier 1892.

¹⁰ Ostale oznake: Pahič – grob 4, Brodar – grob 1, Wolf – lobanja 4. Oznake na listkih: skelet št. .4, VB4 (2?) ali prečrtana številka 2, vb:1, (3?)3, 3B(prečrtano), 4, vb: 1 iz gr.1. Brodarjeva in Wolf opisujeta tudi čeljustnici, ki pa ju v predanem materialu nismo našli.

Tibia – Three gracile fragments of the diaphysis (6.0 cm, 8.5 cm in 16.0 cm); two fragments of the proximal epiphysis; a fragment of the distal epiphysis.

Fibula – Fragments of the left and right diaphyses (16.0 cm in 16.5 cm).

Foot – A fragment of calcaneus; a fragment of talus (trochlea – 2.8 cm); both gracile. Metatarsal bones: left and right first metatarsal and four unidentifiable fragments.

In addition, 25 fragments of the long bone diaphyses (4.0 cm to 9.0 cm in size) are preserved. Based on the measurements and comparisons of both femurs, an approximate length of 40.0 cm was established. Using Manouvrier's criteria,⁹ the estimated stature of the female individual from Grave 3 is between 151.3 cm and 152.8 cm.

Skeleton 4¹⁰

Female (degree of sexualisation – 1.67); matusus I (40 to 50 years).

Cranium

The cranium is long and gracile.

Cranial measurements: maximum length – approximately 18.3 cm; maximum width – approximately 12.8 cm; frontal bone – coronal length – 10.8 cm, and frontotemporal length 9.2 cm; thickness at inion – 1.3 cm at frontal tubercle – 0.6 cm and at parietal tubercle – 0.4 cm; cranial index 69.9 (dolichocrania).

Frontal bone – Prominent supraciliary arches +1, the left one is more pronounced; medium supraorbital margin 0; glabella has a smooth contour 0; prominence of frontal tubercle -1. Internally, coronal suture is obliterated; externally, lateral end is obliterated, while medial end is still vaguely visible.

Parietal bone – Right: complete. Prominence of parietal tubercle -1. Left: only posterior part of the bone is preserved. Prominence of parietal tubercle -1. Sagittal suture is only seen externally; internally, it is completely obliterated.

Zygomatic bone – A fragment of the left bone.

Temporal bone – Two fragments of the left and right bone with petrous portion and mastoid process -1. Three small fragments of the squama from the area of the mandibular fossa.

⁹ Manouvrier 1892.

¹⁰ Other notes: Pahič – Grave 4; Brodar – Grave 1; Wolf – Cranium 4. Notes on the labels: skeleton No. .4; VB4 (2?) or crossed out number 2; vb:1; (3?)3; 3B (crossed out); 4; VB: 1 from gr.1. Brodar and Wolf also described two mandibles, which were not present among the received material.

Postcranium

Vertebrae – Atlas in fragment vratnega vretenca.

Ossa membri superioris

Scapula – Desna – processus coracoideus, fragment fossae glenoidalis. Leva – fragment processus coracoideus, fragment fossae glenoidalis (višina 3.6 cm).

Humerus – Desni in levi, dva fragmenta corpora (21 cm in 20 cm). Na obeh corpusih srednje močno izražena narastišča.

Radius – Dva gracilna fragmenta: proksimalni del in corpus (17,5 cm) in le corpus (16,8 cm).

Ulna – En fragment corpora (16,8 cm).

Ossa membri inferioris (kosti so srednje do gracilne)

Os coxae – Desno – fragment z incisuro ischiadico maior -2, fragment acetabuluma, fragment s facies auricularis (površina kaže na starost okoli 40 let). Levo – fragment acetabula, fragment tuber ossis ischii, fragment allae ossis ilii.

Femur – Desno – fragment corpora (27,2 cm) in fragment corpora z distalnim delom (9,5 cm). Linea aspera -2. Levo – fragment caputa in colluma, fragment corpora (27,0 cm) Subtrochanterno trans. 2,1 cm, sagitt. – 2,8 cm, obod sredine diafize – 7,5 cm.

Tibia – Fragmenta desnega in levega corpora tibiae (18,0 cm in 13,5 cm).

Fibula – En fragment corpora fibulae (8,0 cm).

Pes – Ossa tarsi: desni talus (trochlea – 2.7 cm), fragmenta desnega in levega calcaneusa (sklepna površina: 1,5 cm).

Skelet 5¹¹

Moški (stopnja seksualizacije je + 1.82), maturus II (med 50 in 60 leti).

Cranium

Lobanjo smo delno rekonstruirali iz 16 fragmentov. Robustnega videza. V normi verticalis romboidne oblike. Močna debelina kosti.

Mere na lobanji: največja dolžina – 17,3 cm, največja širina – 13,4 cm, os frontale – coronalno 12,3 cm, frontotemporalna širina 10,0 cm, bigonialna širina 8,7 cm, bikondilarna širina 12,5 cm, višina kondila 7,4 cm, širina ramusa 3,9 cm, debelina na

Occipital bone – A fragment of the superior part of the squama with a smooth contour, the basilar part, and the lateral part with left condyle are preserved. The lambdoid suture is distinct.

Postcranium

Vertebrae – Atlas and a fragment of cervical vertebrae.

Bones of the upper body

Scapula: right – coracoid process; a fragment of the glenoid cavity. Left – a fragment of coracoid process; a fragment of glenoid cavity (height 3.6 cm).

Humerus – Right and left, two fragments of the diaphyses (21 cm and 20 cm). The muscle attachments on both diaphyses are moderately pronounced.

Radius – Two gracile fragments: a proximal end with diaphysis (17.5 cm) and a diaphysis (16.8 cm).

Ulna – One fragment of the diaphysis (16.8 cm).

Bones of the lower body (bones are moderate to gracile)

Pelvis – Right: a fragment with the greater sciatic notch -2; a fragment of the acetabulum; a fragment with the auricular surface (morphological characteristics indicate an age of about 40 years). Left: a fragment of the acetabulum; a fragment of the ischial tuberosity; a fragment of the iliac wing.

Femur – Right: a fragment of the diaphysis (27.2 cm); and a fragment of the diaphysis with the distal end (9.5 cm). Linea aspera -2. Left: a fragment of the head and neck; a fragment of the diaphysis (27.0 cm). Transverse subtrochanteric diameter – 2.1 cm; sagittal subtrochanteric diameter – 2.8 cm; midshaft circumference – 7.5 cm.

Tibia – Two fragments of right and left diaphyses (18.0 cm in 13.5 cm).

Fibula – One fragment of the diaphysis (8.0 cm).

Foot – Tarsal bones: right talus (trochlea – 2.7 cm); fragments of right and left calcaneus (joint surface 1.5 cm).

Skeleton 5¹¹

Male (degree of sexualisation + 1.82); maturus II (between 50 and 60 years).

Cranium

Cranium was partially reconstructed from 16 fragments. It is robust. Vertical norm presents a rhomboidal form. Bones are very thick.

Cranial measurements: maximum length – 17.3 cm; maximum width – 13.4 cm; frontal bone in coronal plane 12.3 cm; frontotemporal breadth 10.0 cm; bigonial width 8.7 cm; bicondylar width 12.5 cm; condylar height 7.4 cm; ramus width 3.9 cm;

¹¹ Ostale oznake: Pahič – grob 5, Brodar – grob 4, Wolf – lobanja 1. Oznake na listkih: skelet št 2, skelet št.4, VB 2 (5?) 5?, grob 5, 4 VB: 2.

¹¹ Other notes: Pahič – Grave 5; Brodar – Grave 4; Wolf – Cranium 1. Notes on the labels: skeleton No. 2; skeleton No. 4; VB 2 (5?) 5?; grave 5; 4 VB:2.

mestu tuber frontale 0,6 cm, tuber parietale 0,6 cm, kranialni indeks 77,5 (mesocrania), indeks čelnice 81,3, širinski indeks mandibule 69,6.

Os frontale – Delno fragmentirana. Manjka pars orbitalis, viden velik levi sinus frontalis. Ostali deli ohranjeni. Arcus superciliaris +2, izražena glabella +2, margo supraorbitalis +2, tubera neizrazita +1. Področje levega arcusa superciliarisa močnejše izraženo kot na desni strani. Sutura coronalis rahlo vidna le eksterno.

Os parietale – Desna – cela. Leva - fragmentirana na mestu tuber parietale. Sutura sagittalis rahlo vidna le eksterno. Sutura squamosa je pri obeh še odprta.

Os occipitale – Ohranjen le zgornji del squame nad področjem iniona, ki pa ni ohranjen. Sutura lambdoidea rahlo vidna le eksterno.

Os zygomaticum – Desna in leva. Processus frontalis širine: desno 1,3 cm, levo 1,2 cm. Izraženost +1.

Os temporale – Le fragment processus zygomaticusa.

Mandibula – V celoti rekonstruirana iz sedmih delov in zelo robustna +2. Protuberantia mentalis +2, angulus močna, a ne evertirana +2, močan margo inferior +2. Višina corpus mandibule izrazita. Foramen mentale je med spodnjim drugim praemolarjem in prvim molarjem. *Dentes* – Desno – ohranjeni vsi zobje. Levo – v alveolah manjkata drugi inciziv in prvi praemolar. Zobje so zelo veliki. Abrazija je močna. Stanje abrazije nakazuje na starost 45 let in več.

Maxilla – Ohranjena leva in desna, vendar fragmentirana; predvsem levi del. *Dentes* – Desno – oba inciziva, canin, prazna alveola, drugi praemolar, prvi in drugi molar ter prazna alveola. Levo – oba inciziva, canin prazna alveola; nadalje ni ohranjeno. Ohranjen je še molar, verjetno levi. Grizna površina je neenakomerno obrabljena, karies pa prisoten na dveh mestih na meji med krono in korenino.

Postcranium

Costae – 3 fragmenti dorzalnih delov in 13 fragmentov corpusov costae (velikosti od 4,0 cm do 16,0 cm).

Ossa membri superioris

Scapula – Desna – fragment, cavitas glenoidalis (višina 4,4 cm), fragmenti cavitasa, spinae scapulae in processus coracoideusa. Robustno. Leva – ni ohranjena.

Clavicula – Desna – fragment corpora in extr. acromialis (12,0 cm). Leva - fragment corpora (7,8 cm).

Humerus – Desni – fragment corpora in distalnega dela (11,5 cm), biepilekondilarna širina 6,2 cm, minimalni obod corpora 6,7 cm. Levi – fragment corpora in distalnega dela (15,0 cm), biepilekondilarna širina 6,3 cm in še trije fragmenti stene corpora (od 2,0 do 6,0 cm).

Radius – Fragmenti proksimalne epifize z nekaj corpusa (4,5 cm), capitulum premer 2,2 cm.; fragment

thickness at frontal tubercle 0.6 cm, at parietal tubercle 0.6 cm; cranial index 77.5 (mesocrania); frontal index 81.3, mandibular width index 69.6.

Frontal bone – Partially fragmented. Orbital part is missing, and a large left frontal sinus is visible. The rest of the bone is preserved. Supraciliary arch +2; pronounced glabella +2; supraorbital margin +2; frontal tubercles are unpronounced +1. Supraciliary arch is more pronounced on the left side than the right. Coronal suture is only discernible externally. Both squamous sutures are open.

Occipital bone – Only the superior part of the squama around the inion is preserved. The lambdoid suture is only discernible externally.

Zygomatic bone – Right and left. Frontal process width: right 1.3 cm; left 1.2 cm. Prominence +1.

Temporal bone – Only a fragment of the zygomatic process is preserved.

Mandible – Completely reconstructed from seven fragments; very robust +2. Mental protuberance +2; strong but not everted angles +2; strong inferior margin +2. Pronounced height of mandibular body. Mental foramen is positioned between second premolar and first molar. Dentition – Right: all the teeth are preserved. Left: second incisor and first premolar are missing from the alveoli. Teeth are very big and strongly abraded. Dental wear indicates age over 45 years.

Maxilla – Left and right part are preserved but fragmented, left in particular. Dentition – Right: both incisors, canine, empty alveolus, second premolar, first and second molar and empty alveolus. Left: both incisors, canine, empty alveolus, the rest of the maxilla is not preserved. A molar is also present, probably left. The biting surface is unevenly abraded, with caries present in two locations on the cervical line between the crown and the root.

Postcranium

Ribs – three fragments of the dorsal ends and 13 fragments of the bodies (4.0 cm to 16.0 cm in size).

Bones of the upper body

Scapula – Right: a fragment of the glenoid cavity (height 4.4 cm); fragments of the cavity, scapular spine and coracoid process. Robust. Left: not preserved.

Clavicle – Right: a fragment of the body with the acromial end (12.0 cm). Left: a fragment of the body (7.8 cm).

Humerus – Right: a fragment of the body with the distal end (11.5 cm) and biepilekondylar width 6.3 cm; three fragments of the diaphysis (2.0 cm to 6.0 cm).

Radius – Fragments of the proximal epiphysis with part of the diaphysis (4.5 cm) and diameter of capitulum 2.2 cm; fragments of the distal epiphysis and part

distalne epifize in nekaj corpora (3,9 cm), dva fragmenta corpora (9,8 cm in 13,3 cm). Obod diafize 4,5 cm.

Manus – Trije fragmenti phalanx proximalis, dva phalanx media.

Ossa membri inferioris

Coxa – Desna – fragment acetabula, 7 fragmentov allae ossis ilii. Leva – fragment acetabula, fragment robustnega tuber ossis ischii +2, fragment facies auricularis s površino pri starosti okoli 50 let, incisura ischiadica ozka +2, fossa iliaca globoka +2, arc composee +2.

Os pubis – Fragmentirana leva in desna. Angulus pubis +2, facies symphyseos površina pri starosti več kot 50 let.

Femur – Desni – fragmenti caput in corpus (26 cm). Levi – proksimalna epifiza in corpus (41 cm). Caput premer 4,8 cm. Subtrohanterno trans. 3,2 cm, sagitt. 2,6 cm, Obod sredine diafize 8,8 cm. Močna linea aspera +2.

Patella – Desna – fragmentirana. Leva – cela.

Tibia – Desna – fragment corpora in distalnega dela (27,5 cm). Obod diafize 7,1 cm. Leva – fragment corpora (20 cm) in fragment distalnega dela.

Fibula – Desna – fragment corpora in proksimalnega dela (23,0 cm). Leva – fragment corpora in distalnega dela (29,0 cm).

Pes – Ossa tarsi: levi calcaneus (sklepna površina 2,4 cm). Fragmenta levega in desnega talusa (trochlea – 3,5 cm). Ossa metatarsi: fragmenta robustnih leve in desne prve stopalnice in še pet fragmentov corpusov. Phalanges digitorum pedis: prvi proksimalni in še dva nedoločljiva.

ZAKLJUČKI

Pri pregledu človeškega kostnega materiala iz srednje-bronastodobne gomile z Brezja pod Brinjevo goro nad Zrečami, ki ga je v letu 1956 izkopal arheolog Stanko Pahič, smo uspeli sestaviti štiri skelete iz grobov 2, 3, 4 in 5.

Pri vseh štirih skeletih so spolno značilni znaki na lobanji in kolčnici jasno izraženi. Znaki za točnejšo starostno diagnozo niso vsi prisotni ali pa so ohranjeni le fragmentarno (*sl. 1*).

Dva skeleta sta pripadala osebam moškega spola (št. 2 in št. 5), ki sta izredno robustnega videza. Vida Brodar je oba tipološko opredelila kot kromanjoidni tip. Izredno močno je izoblikovana čelnica, robustni spodnji čeljustnici pa kažeta s svojo obliko arhaične znake. Tudi obraba nekaterih zob je specifična. Stomatolog Vlado Wolf nadrobno opisuje specifičnost oblikovanja loka v mandibuli v eliptični obliki, kar

of the diaphysis (3.9 cm); two fragments of the diaphysis (9.8 cm and 13.3 cm). The circumference of the diaphysis 4.5 cm.

Hand – Three fragments of the proximal phalanx, two medial phalanges.

Bones of the lower body

Pelvis – Right: a fragment of the acetabulum; seven fragments of the iliac wing. Left: a fragment of the acetabulum; a fragment of a robust ischial tubercle +2; a part of the auricular surface with morphological characteristics indicating age around 50 years; narrow greater sciatic notch +2; deep iliac fossa +2; arc composee +2.

Pubic bone – Fragmented left and right. Pubic angle +2; pubic symphysis with morphological characteristics indicating age over 50 years.

Femur – Right: fragments of the head and diaphysis (26 cm). Left – proximal epiphysis and diaphysis (41 cm). The diameter of the head 4.8 cm. Transverse subtrochanteric diameter 3.2 cm; sagittal subtrochanteric diameter 2.6 cm; midshaft circumference 8.8 cm. Pronounced linea aspera +2.

Patella – Right: fragmented. Left: completely preserved.

Tibia – Right: a fragment of the diaphysis and distal end (27.5 cm). Midshaft circumference 7.1 cm. Left: a fragment of the diaphysis (20 cm) and a fragment of the distal end.

Fibula – Right: a fragment of the diaphysis and the proximal end (23.0 cm). Left: a fragment of the diaphysis and the distal end (29.0 cm).

Foot – Tarsal bones: left calcaneus (joint surface 2.4 cm). Fragments of left and right talus (trochlea – 3.5 cm). Metatarsals: fragments of robust left and right first metatarsal and five fragments of the bodies. Phalanges: first proximal and two unidentifiable.

CONCLUSIONS

While analysing skeletal material from the Bronze Age tumulus at Brezje below Brinjeva gora, excavated by the archaeologist Stanko Pahič in 1956, I was able to reconstruct four skeletons from the Graves 2, 3, 4 and 5.

Cranium and pelvic bones of all four skeletons have clearly expressed sexually dimorphic traits. Meanwhile, skeletal elements with characteristics allowing for an accurate age assessment are either missing or fragmented (*fig. 1*).

Two of the skeletons (No. 2 and No. 5; *fig. 1*) were identified as males with a very robust appearance. Vida Brodar determined both skeletons to be of a Cro-Magnon type. Their frontal bone had a strong contour, while the shape of their mandibles presented archaic characteristics. The two individuals also had a specific dental wear on some of their

Slika 1. Povzetki analize kostnega materiala iz srednjebronastodobne gomile z Brezja pod Brinjevo goro nad Zrečami.

Figure 1. Summary of the analysed skeletal material from the Middle Bronze Age tumulus at Brezje below Brinjeva gora.

Grob št. / Grave No.	Tip skeleta / Skeletal type	Spol / Sex	Starost / Age	Ocen. višina / Stature
Gr. 2	Kromanjonski / Cro-Magnon	Moški / Male	Maturus II (več kot 50 let) / (over 50 years)	/
Gr. 3	Mediterraniden / Mediterranean	Ženski / Female	Adultus (več kot 20 let) – okoli 30 let (<i>Os coxae</i>) / (over 20 years) – around 30 years (<i>Os coxae</i>)	151,3–152,8 cm
Gr. 4	/	Ženski / Female	Maturus I (med 40 in 50 let) / (between 40 and 50 years)	/
Gr. 5	Kromanjonski / Cro-Magnon	Moški / Male	Maturus II (med 50 in 60 let) / (between 50 and 60 years)	/

nakazuje na primitiven način trganja hrane. Modernjša oblika je parabolna. Tudi velikostni razmerji med drugim in tretjim molarjem sta zanimivi, saj osmica po velikosti ne zaostaja za sedmico, kar je primer pri modernem človeku.

Dva skeleta sta opredeljena kot ženska. Skelet št. 3 ima značilno zelo dolgo oblikovano lobanjo, je zelo gracilen in po Brodarjevi mediteranidnega tipa. To je edini skelet, pri katerem smo s pomočjo kombinacije delno ohranjenih dolžin obeh femurjev določili domnevno telesno višino med 151,3 cm in 152,8 cm. Ženski je tudi skelet št. 4, ki je imel tudi dolgo oblikovano lobanjo, vendar tipološko ni opredeljiv.

Zanimivo je tudi pojavljanje kariesa, ki je za to obdobje redkost. Posebnih patoloških sprememb na kosteh nismo opazili.

teeth. Stomatologist Vlado Wolf provided a detailed description of a distinctly formed elliptical mandibular arch, indicating a primitive food-tearing habit. A modern mandibular form would have been parabolic. Also interesting is the size ratio between the second and third molar: in contrast to modern humans, the third molar is not smaller compared to the second.

Two of the skeletons were identified as females. Skeleton No. 3 has a characteristically long cranium, which is very gracile and, according to Vida Brodar, of a Mediterranean type. This is the only skeleton with an assigned stature, which was estimated to 151.3 cm to 152.8 cm based on the combined length of partially preserved femurs. Skeleton No. 4 with a long cranial shape, which was typologically indefinable, was recognized as the second female.

The presence of caries in the analysed material is notable, given their rarity in Bronze Age remains. No distinct pathological changes on the bones were observed.

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