

## WIETENBERG CULTURE INHUMATION GRAVES DISCOVERED AT GÂMBAȘ (AIUD, ALBA COUNTY, ROMANIA)

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**Abstract:** From a geographic perspective, the archaeological site where the graves discussed here were discovered is located close to the northern border of Gâmbaș locality (part of the Aiud municipality), on the left bank of the Mureș River, on its first terrace. The site was discovered and delimited by specialists from the National Museum of Unification in Alba Iulia through an intrusive diagnosis conducted on the route of a future motorway. The preventive archaeological investigations, conducted by specialists of the above mentioned institution, started on the 3<sup>rd</sup> of November 2014 (respectively 30<sup>th</sup> of January 2015 for the second part of the site), and continued until the site was fully investigated (10<sup>th</sup> of April 2015).

From an archaeological perspective, the investigated surface was divided in two distinctive areas. The first one, labelled Sp. 1, was rich in archaeological finds and it comprised, in fact, successive habitation layers. In the second area, investigated through multiple sections (S57 to S163), only eight isolated archaeological features were discovered and documented. The features assigned to the Bronze Age (Wietenberg culture) were concentrated in the northern part of surface Sp. 1, while features assigned to the La Tene and migration period were predominant in the rest of Sp. 1. A few isolated features dated to the First Iron Age (Gava culture), the post-roman period, and the early middle ages were also identified.

A number of 217 Bronze Age (Wietenberg culture) features were identified and documented, representing storage pits, refuse pits, fire fireplaces, dwellings, and inhumation graves.

Four Bronze Age inhumation graves were discovered, labelled: C18 (adult male, age 35-44), C316 (adult female, age 30-35), C320 (sub-adult, age 1,5-4), and C347 (adult male). The grave goods consisted only of pottery vessels, most of them preserved in a fragmentary state. Except for grave C 316, the funerary sets were rather poor. Based on the shape and decoration elements of these ceramic vessels, the graves were assigned to the second phase of the Wietenberg culture.

**Rezumat:** Din punct de vedere geographic, situl arheologic analizat în prezentul articol este situat la limita nordică a localității Gâmbaș, pe malul stâng al râului Mureș, pe prima terasă. Situl a fost descoperit și delimitat de specialiști de la Muzeul Național al Unirii din Alba Iulia în urma unui studiu de diagnostic arheologic intruziv pe traseul viitoarei autostrăzi. Cercetările arheologice preventive au început pe 3 noiembrie 2014 și au continuat până pe 10 aprilie 2015.

*Din punct de vedere arheologic, suprafața investigată a fost împărțită în două arii distincte. Prima dintre acestea, numită Suprafața 1, a fost bogată în descoperiri și a înregistrat mai multe locuiri suprapuse. În cea de a doua suprafață au fost cercetate doar opt complexe arheologice. Cele atribuite culturii Wietenberg au fost concentrate în Suprafața 1, alături de cele de epoca La Tène și perioada migrațiilor, care erau predominante. Tot aici au fost cercetate câteva complexe din perioada timpurie a epocii fierului (cultura Gáva), perioada post-romană și cea medieval timpurie.*

*Au fost cercetate un număr de 217 complexe atribuite culturii Wietenberg, gropi, vetre, locuințe dar și patru morminte de înhumăție. Acestea au fost numerotate cu C18 (conținea osemintele unui bărbat adult, cu o vârstă de 35-44 ani), C316 (femeie adultă, în vârstă de 30-35 ani), C320 (subadult, 1,5-4 ani) și C347 (femeie adultă). Inventarul mormintelor era compus numai din vase ceramice, cea mai mare parte fragmentare. Cu excepția C316, inventarele erau relativ sărace. Pe baza decorului și a formelor ceramice, mormintele pot fi atribuite cronologic celei de a doua faze a culturii Wietenberg.*

**Keywords:** Mureș River, Wietenberg Culture, grave, Middle Bronze Age, pottery.

**Cuvinte cheie:** râul Mureș, cultura Witenberg, mormânt, Perioada Mijlocie a Epocii Bronzului, ceramică.

## INTRODUCTION

The archaeological site at Gâmbaș in the Aiud town has been identified by the National Museum of Unification in Alba Iulia through an intrusive archaeological diagnosis (starting in the summer and autumn of 2014). The archaeological diagnosis was necessary as a series of construction works were planned over the area of the site, consisting of a motorway from Sebeș to Turda and an agricultural road towards the Gâmbaș locality (Fig. 1).

From a geographical standpoint, the archaeological site where the discoveries were made is situated on the left bank of the Mureș river, more precisely on the portion of the first river terrace which is at the border of the Gâmbaș locality (Gâmbaș is part of the town Aiud), near a hill, which the locals call *Măguricea* (Fig. 2).

The rescue excavations undertaken by the National Museum of Unification in Alba Iulia were conducted in autumn 2014 and spring 2015. The research showed that this area had been settled across several historical ages: The Middle Bronze Age (Wietenberg Culture), Early Iron Age (Gáva Culture); Late Iron Age, represented by Dacian features (of the 1<sup>st</sup> c. BC - 1<sup>st</sup> c. AD), Post-Roman Period (4<sup>th</sup>-6<sup>th</sup> c. AD) and Migration Period (7<sup>th</sup>-8<sup>th</sup> c. AD).

From an archaeological standpoint, we identified two zones in the researched area. The first, labelled "Sp. 1", was rich in archaeological finds. The second zone, revealed by sections Sp. 56 and Sp. 55, contained no archaeological remains or marks.

In the southern zone, which is the NW part of Gâmbaș, a surface covering 14949.25 m<sup>2</sup> was excavated and labelled as Sp. 1 (Pl. 1). This large surface, in which the overlapping habitation layers were discovered, yielded interesting features and artifacts, comprising in total a number of 412 features (storage pits turned into garbage pits, ritual pits, fireplaces, dwellings and graves) of which 217 belonged to the Middle Bronze Age (Wietenberg Culture, pl. 2), 31 features to the Early Iron Age (Gáva Culture), 34 features to the Late Iron Age (more specifically garbage and ritual pits belonging to the Dacian period), 9 features to the Post-Roman Period (consisting of pits, surface dwellings, graves and fireplaces), 22 features were assigned to the Migration Period (surface dwellings with fire installations made out of pebbles, garbage pits, fireplaces and graves), and one feature was dated to the Early Middle Ages. Another 67 features could not be chronologically determined. These are pits or fireplaces which yielded no artefacts.

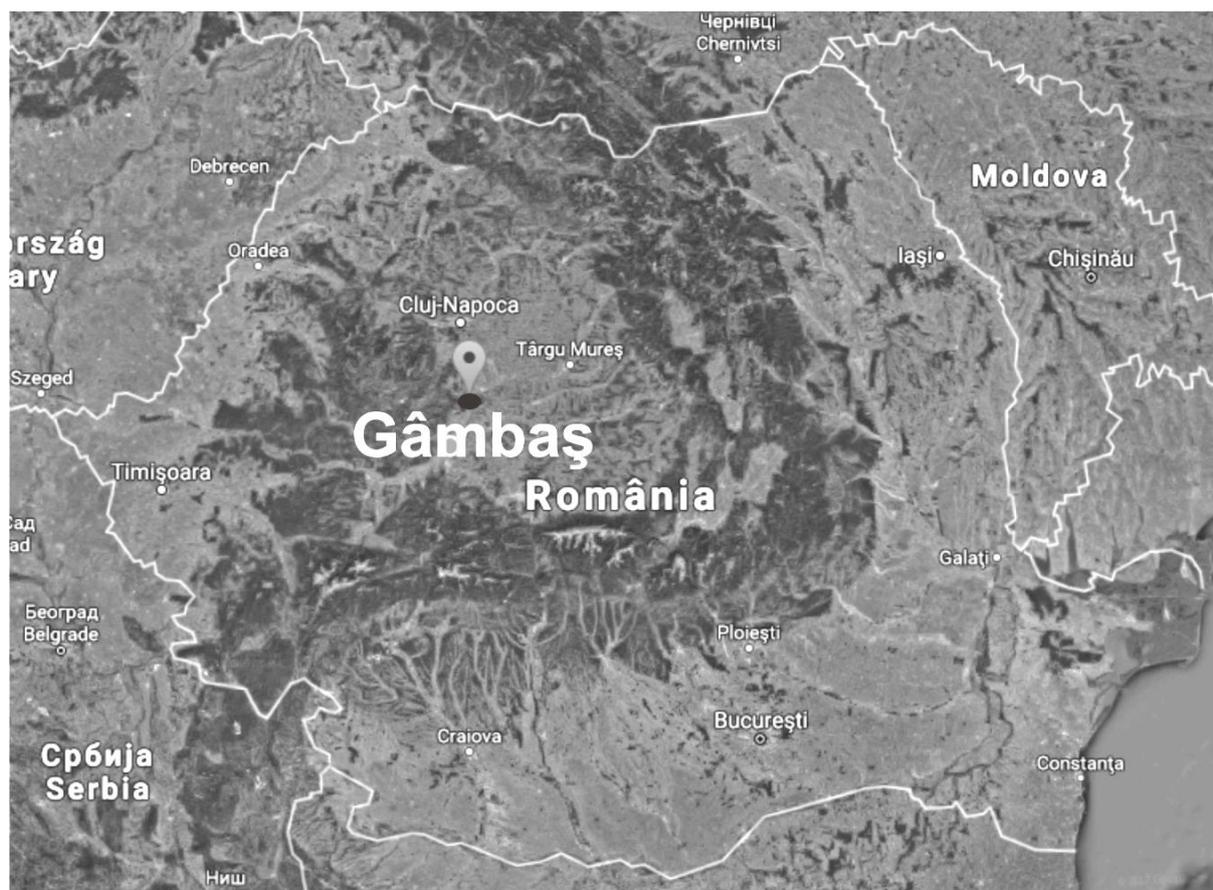


Fig. 1. Location of the Gâmbaş site.

From a stratigraphic perspective, a black 25 cm thick topsoil layer was identified. Underneath, there was a deposition layer formed by soil eroded from the surrounding slopes. This layer had a light brown colour and could be detected up to the depth of 0,45 m. It covered the cultural layer which had a black colour, contained pigments, pebbles, charcoal pieces etc. This layer had of thickness of about 25-30 cm. All the researched archaeological features were identified in this cultural layer. Below 0.7 m one could observe the natural brownish yellow soil, without any human interventions.

### THE FEATURES

As mentioned above, 217 features had been found and researched in this area, dated to the Bronze Age and assigned to the Wietenberg Culture, consisting of storage pits turned into refuse pits, various pits with special characteristics, dwellings, and inhumation burial. Four Bronze Age burials were observed in different areas throughout the settlement:

**Ft. 18** is a grave found in the north-western part of this settlement, found at the depth of 0.7 m. It was 1.7 m long and 0.6 m wide. Its maximum depth was of 0.8 m. The deceased was arranged in a crouched position, with the head towards northward. The inventory consisted of two ceramic fragments (vessel bottoms) specific to the Wietenberg culture. (Fig. 3/1; Pl. 2/1);



Fig. 2. Location of Site 3 at Gâmbaș.

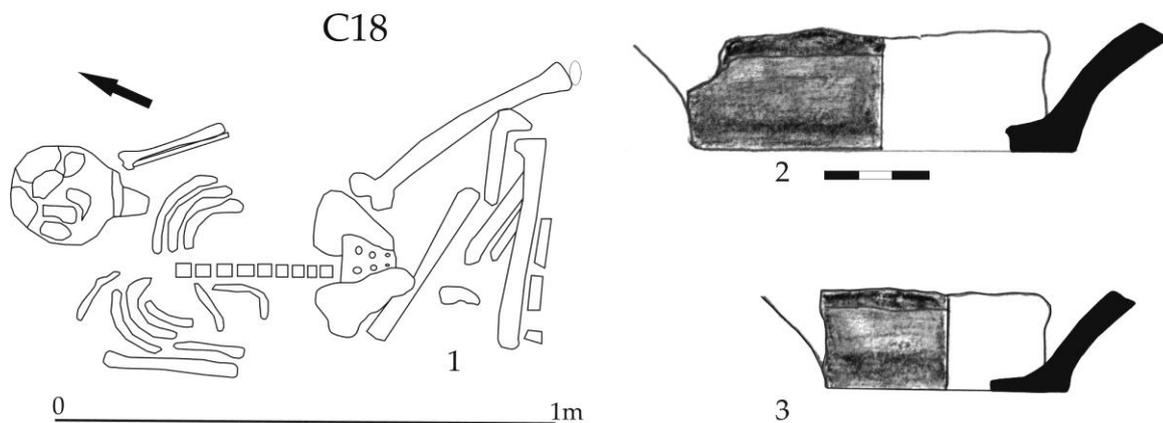


Fig. 3. Ft. 18 and its inventory.

**Ft. 316** is a grave belonging to a female. The grave was found in the center of the settlement and it was observed at a depth of 0.7 m. It was 0.86 m long, 0.48 m wide and 0.81 m deep. The deceased was placed in a crouched position, laying on her right side, with her head towards SE. The inventory (the richest of the Bronze Age graves that we found during this excavation) consisted of pottery belonging to the Wietenberg Culture (Fig. 4/1; Pl 2/2):

- vessel, with the lower part ornamented with a solar motif, consisting of four curved rays emanating from the center, made through parallel incisions, grouped in pairs. It is grayish black, has a fine paste and contains fine sand as temper. Its diameter is 15.2 cm, its height 2.5 cm (Fig. 4/2);
- fragmentary vessel, with a strong bulge, ornamented with wide, diagonal, parallel grooves on the belly. The vessel's rim measures 12 cm in diameter, its bottom 6 cm in diameter, its maximum diameter 17.5 cm and its height 12.5 cm (Fig. 4/3);

- fragment of a vessel rim with a slightly elevated handle, decorated with parallel longitudinal incisions (amounting to 3). On the exterior side, the rim is decorated with parallel diagonal incisions (Fig. 4/4);
- ceramic fragment decorated with diagonal incisions arranged in a grid (Fig. 4/5);
- fragment of vessel's bottom made of semi-coarse paste, with small pebbles as temper, of brownish red color. Its diameter amounts to 9.2 cm (Fig. 4/6).

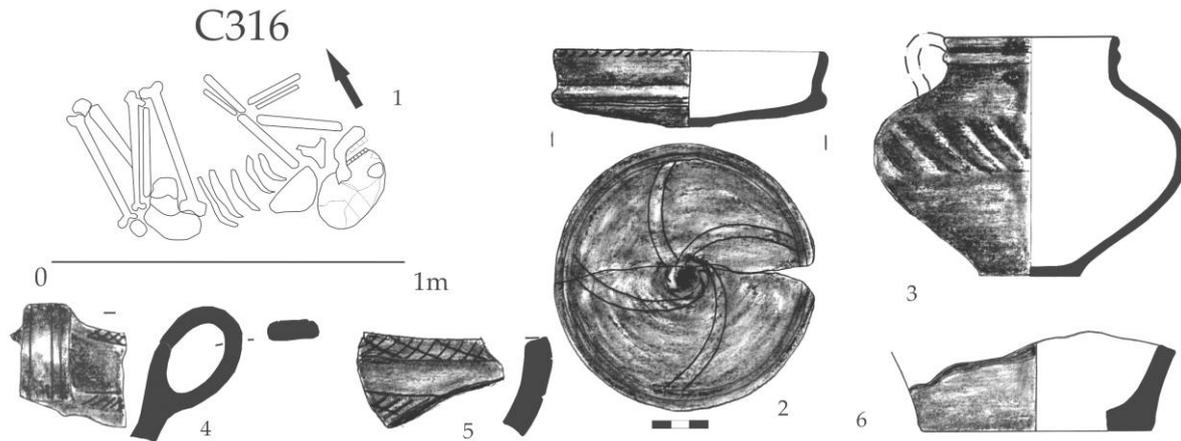


Fig. 4. C316 and its inventory.

**Ft. 320** is a child's grave identified in the central area of the settlement. Its top part was identified at a depth of 0.7 m. It was 0.34 m long, 0.27 m wide and 0.84 m deep. The deceased lay in a crouched position, possibly on his left side, with the head oriented towards the East. The inventory consisted of a complete vessel, placed next to the head (Fig. 5/1; Pl. 2/3).

- the vessel has four handles, of which only one remains. It is decorated with wide, parallel and oblique grooves on the belly. Right underneath the rim, but also one above the grooves, are bands with incised grid patterns. Sizes: rim diameter 11 cm, bottom diameter 6 cm and maximum diameter 13.6 cm (Fig. 5/2).

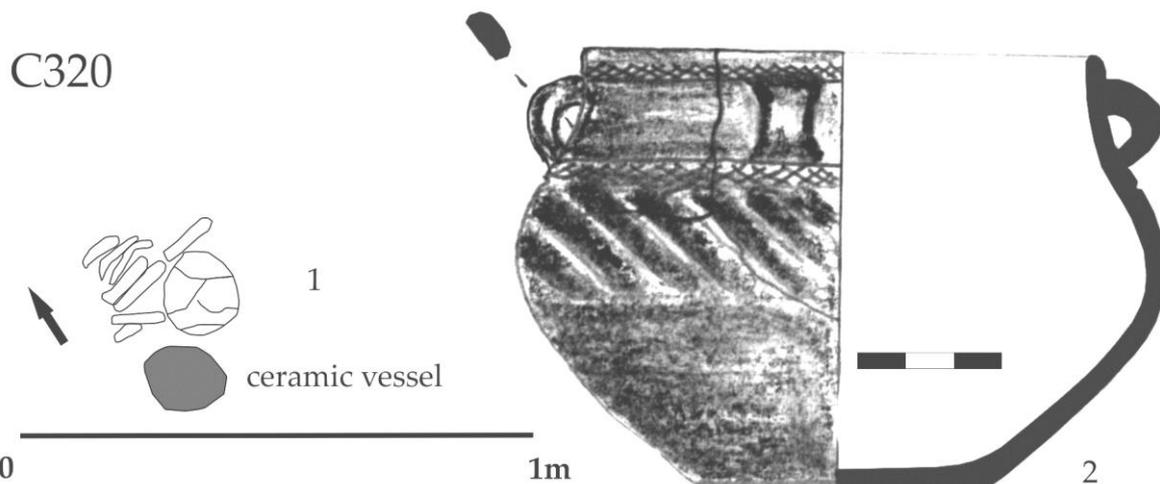


Fig. 5. Ft. 320 and its inventory.

**Ft. 347** is a grave found in the East-central part of the settlement, which was identified at a depth of 0.7 m. Its length amounted to 0.67 m and its width to 0.37 m, while its maximum depth was 0.82 m. The deceased lay crouched, with its head towards SE. This feature was cut by another, from a more recent period (Fig. 6/1; Pl. 2/4).

Its inventory consisted of two ceramic fragments:

- ceramic fragment (tureen), with a simple girdle right under the rim. It was made out of semi-fine paste, with sand and small pebbles as temper and of grey colour (Fig. 6/2).
- ceramic fragment made of semi-coarse paste with pebbles, the exterior decorated with parallel striations, the exterior had a grey colour, while the interior was reddish (Fig. 6/3).

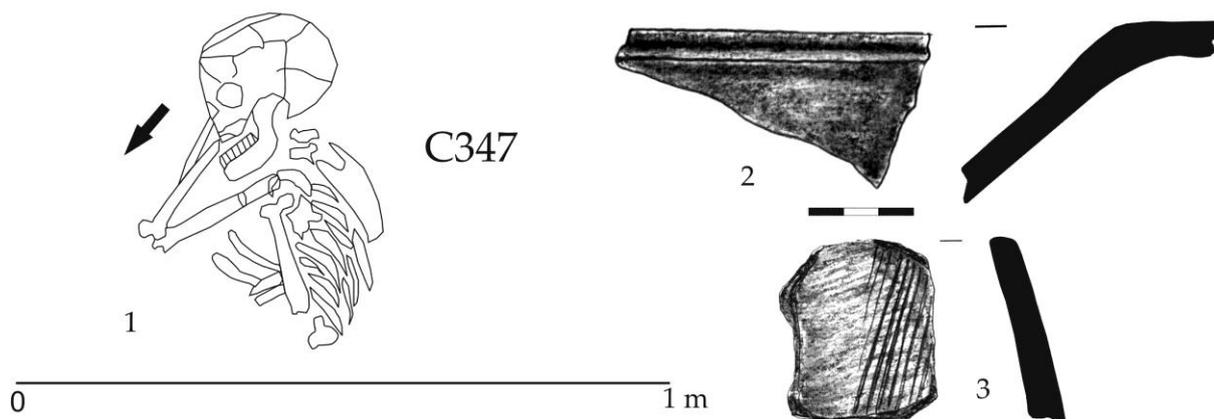


Fig. 6. Ft. 347 with its inventory.

Based on their shapes and decorations, the artefacts retrieved from this grave belong to the second phase of the Wietenberg Culture and can have a relative dating in the Middle Bronze Age II (MB II), sometime between 1900-1700 BC<sup>1</sup>.

The observations made during the excavation showed that, in fact, the deceased were buried in shallow graves, as all of them were identified at a depth of 0.7 m. Therefore, both the skeletons and the inventory were exposed to external factors.

It is obvious that we are dealing with special burials. It is well known that incineration is the predominant rite in the Wietenberg Culture. Thus, inhumation burials, rarely encountered in the Wietenberg medium, were associated with uncommon funerary practices. We do not intend to review the entire discussion about the existence of funerary discoveries in Wietenberg settlements, since there has been just recently a debate on this subject<sup>2</sup>. The old finds are being completed now by those from Gâmbaş, Aiud and Şoimuş<sup>3</sup>.

### ANTHROPOLOGICAL ANALYSIS OF THE DISCOVERED BONES

The anthropological analysis for the discovered bones was made at the Center for Molecular Biology (Centrul de Biologie Moleculară) and the Institute for Experimental Research in Bio-Nano-Sciences (Institutul de Cercetări în Bio-Nano-Ştiinţe) at the Babeş-Bolyai University in Cluj-Napoca and turned out to be very interesting. This preliminary study did not reveal

<sup>1</sup> Gogâltan 2015, 75-78, Fig. 23.

<sup>2</sup> Bălan 2014, 95-118, with analogies.

<sup>3</sup> Burlacu-Timofte, Bălan 2017; Marc *et alii* 2017.

signs regarding a possible violent demise in the case of the four individuals. However, the violent nature of their death cannot be excluded (some traumatic interventions do not leave any marks on the skeleton).

Therefore, we shall reiterate some details about the 4 graves from the Bronze Age:

**Ft. 18:** the skeleton found in the first grave was poorly preserved, represented by only a few bones. Based on the cranial characteristics and the level of the pelvis, the individual has been determined to be a male, and his age at the moment of death was between 35 and 44 years. In the surviving 17 teeth, no caries, dental abscesses or hypoplasias were identified. Dental wear is weak to moderate. Out of the 12 joints, just the distal femur and the left proximal tibia have weak age-related degradation changes. Out of 6 long bones, none present subperiosteal inflammations. *Cribra orbitalis*<sup>4</sup> was not identified, instead, healed porotic hyperostosis appears on the cranium. Schmorl's nodes were noticed on several vertebrae<sup>5</sup>.

**Ft. 316:** most of the bones of this skeleton were preserved. The gender was determined as being feminine. The age at death had been between 30 and 35. 23 teeth have been preserved. Two teeth lost prior to death were identified (the first mandibular molar of the right side and the mandibular lateral left incisor), as well as two abscesses (the 2<sup>nd</sup> mandibular right premolar and the left lateral mandibular incisor). Dental plaque and peritonitis are weak. No hypoplastic defects are present<sup>6</sup>. Wear of the molars is moderate. Out of 31 joints, 11 are affected by a weak arthritis: both temporo-mandibular joints, the right acromio- and sternoclavicular joints, the right glenoid cavity, the bones of the right hand, the right acetabular fossa, the right proximal femur, the right proximal tibia, the left distal humerus and the proximal left radius. A series of thoracic and lumbar vertebrae have Schmorl nodes. All of the 14 long bones were analyzed. Among those, healed subperiosteal inflammation was observed on both femurs and both tibia, as well as an area with active inflammation on the right tibia. This lesion measures 17.4 × 10 mm and is situated on the distal, lateral half. On the cranial bone and on the ethmoid bones no pathologic porosities were identified. Instead, the interior of the frontal sinus, in the area of the glabella, a lesion (8,8 × 12 mm) with a deposited, porous bone, probably in a stage of healing at the moment of death was identified. A lesion with a newly deposited bone layer has been observed on a rib (the total number of ribs could not be established because the majority were in a fragmentary state) from the median area of the ribcage, on the left side, of the *appliqué type*, on the outer side, in the vertebral half. This lesion can be correlated to that of the inner frontal sinus, the two suggesting that the individual suffered a severe respiratory infection.

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<sup>4</sup> *Cribra orbitalia* and *cribra cranii* (or Porotic hyperostosis) are lesions observable on the orbital plate, and on the cranial bone, caused by megaloblastic anemia, which in turn is caused by vitamin B12 deficiency, or by feripriva anemia (iron deficiency). The presence of these lesions indicate the existence of some periods of chronic nutritional deficiency.

<sup>5</sup> Schmorl's nodes are lesions of the vertebral body. The cause of those is congenital, traumatic or because of the aging process. Depending on their frequency and location, Schmorl's nodes indicate certain pathologies, such as a herniated disk.

<sup>6</sup> Inflammation under the periosteal or of the periosteal are a pathological reaction on the surface of the bone, with specific or non-specific causes. It is most often identified in the long bones, periosteal inflammation is one of the most frequent affections found in paleopathological studies because it is a disease in itself as well as an affection related to other diseases, like syphilis.

**Ft. 320:** in the third grave, the bones of the skeleton are few and belong to a child between 1.5 and 4 years (this assumption is based on the identification of a dental eruption and the length of the bones: 10 erupted deciduous teeth and 7 permanent teeth which have not erupted). One of the deciduous teeth, the first molar on the right side of the mandible was affected by a well-spread tooth decay, at the level of the occlusal level, as well as the inter-proximal one, and an abscess was observed on the alveolar bone of this tooth. Dental plaque and periodontal inflammation was not present. No hypoplastic defects were detected. Out of the 9 long bones which were preserved, none had pathological modifications. Similarly, no abnormal porosities were observed on the ethmoid bones, but instead, a healed hyperostosis was detected on the cranial bone.

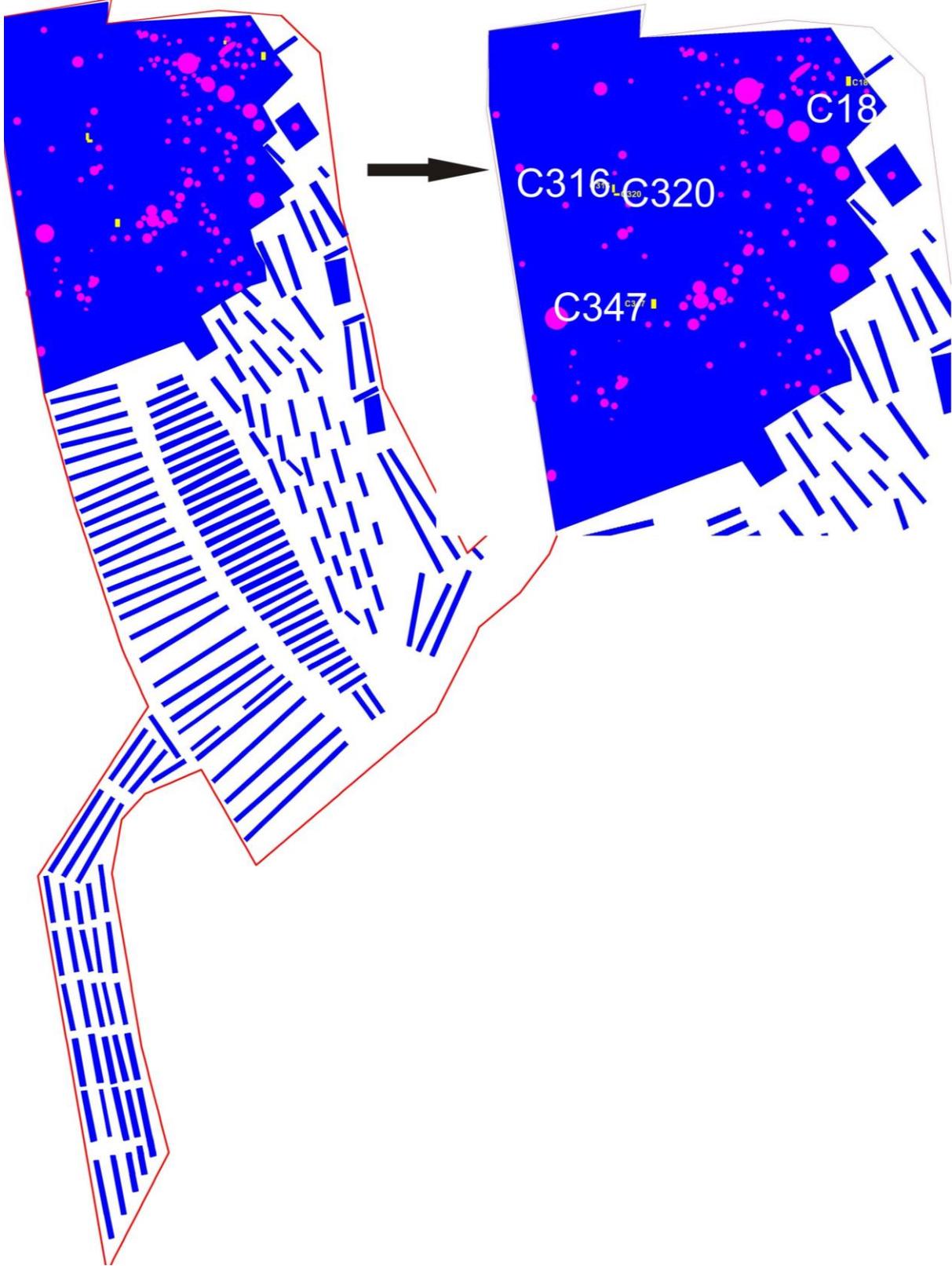
Table 1. The gender and age at the time of death for the analysed individuals.

Feature	Gender	Age at death
<b>Ft.18</b>	M	35-44 years
<b>Ft.316</b>	F	30-35 years
<b>Ft.320</b>	Child	1.5-4 years
<b>Ft.347</b>	M	Adult

Table 2. Distribution of the cranial and post-cranial pathologies for the analysed lot.

Features	CO, HP	D. pathology	Periosteal Inflammation	OA	Traumas	Other pathologies
<b>Ft.18</b>	√			√		
<b>Ft. 316</b>		√	√	√		√
<b>Ft.320</b>	√	√				
<b>Ft. 347</b>	√	√		√		

**Ft. 347:** the bones of the skeleton from the last grave given to analysis are few. Based on some cranial characteristics (the nuchal line, the mastoid process, the supraorbital foramen and the mental protuberance), the skeleton belonged to the masculine gender. His age at the time of death could not be precisely established, but based on the general morphology of the skeleton, one can say that he was an adult. Only 4 permanent teeth remain. Additionally, 3 teeth were lost before death (the second and first left mandibular molars and the first right mandibular molar), 3 teeth have decay (the third mandibular molar, the maxillary canine and the second maxillary molar, all from the right side), and 2 abscesses appear at the following molars: 1<sup>st</sup> left maxillary, 2<sup>nd</sup> right mandibular. No hypoplastic defects were observed and the wear on the molars is moderate. Of the 13 joints that are present, 6 are affected by weak osteoarthritis: the right acromioclavicular joint, the right distal humerus, the right proximal radius, the right distal ulna, the thoracic segment of the spine and the left glenoid cavity. Of the 5 long bones, none have subperiosteal inflammation. Healed porotic hyperostosis is present on the cranial bone, but without being associated with *cribra orbitalia*. On both humerii, the insertion of *Pectoralis major* is well accentuated, with several bony exostosis.



Pl. 1. Plan of the excavations.



1



2



3



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Pl. 2.

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