

Results from the Anthropological Investigation of the Material from a Section of the Necropolis of the Ancient Apollonia Pontica

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During 2020 archaeological season rescue excavations in a sector of the ancient necropolis of Apollonia Pontica (UPI 8173) are unearthed five graves, dated in 360-340 BC up to the end of the IV-beginning of III c. BC, four of which contain human remains. The anthropological investigation aims ascertaining of the number of individuals buried in the graves, their demographic distribution and identification of pathological changes on bones. Remains from nine individuals are recognized, seven males, incl. one adult and six matures, a grown up female and a child of ca. 10 years. Left parietal of a male, grave N 5, presents traces of trauma after incomplete trepanation, or accidental injury. Frontal bone from a male, grave N 3, presents a big osteoma. The individual from grave N 4 suffered from developing spondylosis of spine and advanced toothloss. Possible invalidisation could have caused changes of right femur from grave N 2.

Key words: skeletal remains, Apollonia Pontica, classical period

Introduction.

During 2020 archaeological season rescue excavations in a sector of the ancient necropolis of Apollonia Pontica (site UPI 8173) are unearthed five graves, four of which contain human remains. Grave structures, materials and reconstructed rituals date the structures in 360-340 BC up to the end of the IV-beginning of III c. BC [7].

The anthropological investigation aims to ascertain of the number of individuals buried in the graves, their demographic distribution and identification of possible pathological changes on bones.

Material and Methods

The number of individuals buried in the graves is obtained in most cases by documented repetition of bones. In some cases for recognition of a different individual are used clear differences in age, sex and other anthropological features of skeletal remains. The latter are used also in association of bones to skeletons, which lacked anatomical order on field, after reburial rituals. The age and sex of the individuals is ascertained based on classical methods after macroscopic features [1, 2, 11, 12, 13, 14, 16] (**Table 1**). In one case is used the method for age assessment based on the dental attrition of first to third molars, developed by Brothwell, included later in the study of Bass [4]. Measurements of bones are performed after standard methods [9] and used for additional data in sex assessment after standardized tables [4] and for stature reconstruction, performed, based on the formulae of Trotter-Gleser and Pearso-Lee in V. Alekseev [2].

The examined skeletal remains present also different pathological changes, which are compared to published finds for further interpretation [3, 8, 10].

Table 1. Age and sex identification. Used features in age and sex identification

N	Position	Identification		Age					Sex				
		Sex	Age, years	Dental development	Dental attrition	Skeletal development	Cranial sutures obliteration	Pubic symphyseal surface	Pelvic bones	Cranial bones	Mandible	Measurements	Massiveness, relief development
2	primary	M	40-50/60				●	●	●	●			
	reburial	M	50-60				●			●			
	reburial	M	50-60				●			●			
	reburial	M	20-25				●			●			
	reburial	F	20+			●							●
	reburial	0	Ca. 10	●									
3	primary	M	40-50				●		●	○		○	○
4	primary	M	50-60				●	●	●	●	●		
5	Single fragments	M	35-45		●						●		

M – male; F – female; 0 – undefined (child); ● – feature used in identification; ○ – feature with controversial data for identification

Results and Discussion

In the examined material are recognized skeletal remains from nine individuals. Graves N 3-5 contain remains of one individual each, those from graves N 3 and 4 being relatively completely preserved and identified as males at ca. 40-50 and 50-60 years respectively. In grave N 5 are registered only single bones from a male.

Grave N 2 contains bones from six individuals. A skeleton of one male, at ca. 50-60 years is uncovered in primary position. The remaining individuals are presented by singular reburied bones, which defined other three males (**Fig. 1**), two matures (40-60 years) and a younger one at about 20-30 years, an adult female and a child at about 10 years of age.



Fig. 1. Grave N 2, skull fragments. 1.1. Frontal bone, fragments of both parietals, nose bones and right zygomatic, next to the pelvic girdle of the skeleton in primary position. 1.2. Fragment from calva, South-East corner. 1.3. Fragment from frontal bone, North-East corner

For the three males from grave N 2, skeleton in primary position and one of the reburials and from grave N 4 is possible the reconstruction of stature, which is calculated on average of 165.29 cm, 167.73 cm and 161.69 cm respectively, based on the formula of Trotter-Gleser and 158.71 cm, 162.14 cm and 159.23 cm, based on the Pearson-Lee formula.

Left parietal of the male, grave N 5, 20-30 years presents traces of trauma (**Fig. 2**) after possible incomplete trepanation, or with accidental etiology, as compared to other similar defects [5, 6, 15]. Frontal bone from a male at ca. 40-50 years from grave N 3 presents a big osteoma with a diameter of 13.5×9.5 mm and height of about 5 mm (**Fig. 3**). Being a benign tumor it shouldn't affect much the overall health condition of this individual, but it was quite prominent on the face view. The individual from grave N 4 suffered from developing spondylosis of spine and advanced toothloss, characteristic for the

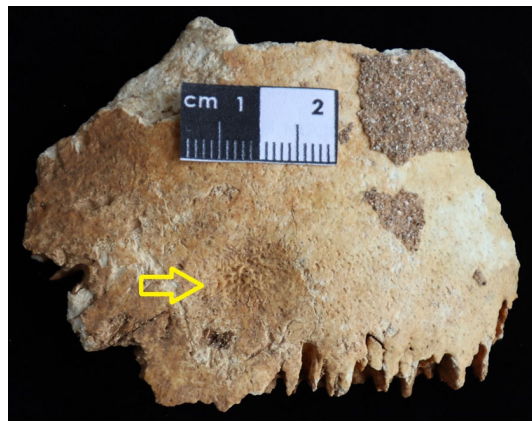


Fig. 2. Grave N 2, fragment from the left parietal, arrow – defect

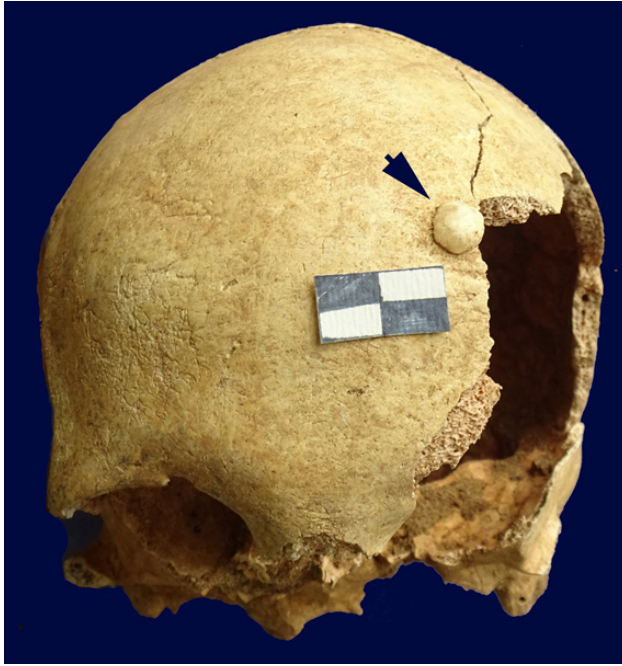


Fig. 3. Grave N 3, *calvaria*, arrow – osteoma

ascertained age in the period. Possible invalidisation could have caused the defect on the condyles of right femur of the individual in the primary position from grave N 2. Additionally, in movement difficulties in the knee joint and possible overloading of adductors, developed the myositis on the linea aspera.

Conclusions

In the studied burial complexes were placed mostly males at advanced age for the period. The bones present a relatively good health condition, but the stature remains relatively short, characteristic for the populations from the Black Sea coast in the period.

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