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## **21. LIFE AND HEALTH ON THE ROMAN LIMES**

Session organisers / Chairpersons:

Nataša Miladinović-Radmilović, Institute of Archaeology Belgrade (E-mail: miladinovic.radmilovic@gmail.com)

This session includes anthropological research of osteological material from old and new archaeological excavations along Limes. This will imply the impact of historical circumstances on the social and health status of the rural, urban and military populations, their paleodemographic structure, the reconstruction of economic relations and the diet, the level of medical care and protection, intentional and accidental traumas, everyday occupations and habits, relations towards children, as well as the reconstruction of funeral practice.

### **The appearance of ulcer on one skeleton from Viminacium and the possibility of its' treatment in Antiquity**

Nataša Miladinović-Radmilović, Ilija Mikić, Dragana Vulović, Ksenija Đukić

Viminacium (Stari Kostolac) was the largest and the most important city in Moesia Superior (Upper Moesia). It was the provincial capital, administrative, religious, military and trade centre. It was built on a strategic location at the confluence of the river Mlava and the Danube, on the crossroad of both land and river routes with large military and trade potential.

On one of the necropoles of Viminacium, Pirivoj, in grave no. 325, skeletal remains of a juvenile female individual were discovered. The burial is dated into the first half of the 3rd century. The deceased juvenile was laid on the back with hands clasped on her stomach. The orientation of the grave was North–South.

Anthropological analyses revealed traces of osteomyelitis with proliferative periostitis on the left tibia and left fibula. The source of infection was related to a large ulcer on the left tibia. The current appearance of the bone shows poor health treatment of the ulcer and active inflammation at the time of death.

In this presentation, we will also focus on the ulcer aetiology and possibility of its' treatment in Antiquity. Treatments will also be briefly discussed, with preparations based on silver and lead, vinegar, honey, etc.

### **Case of myositis ossificans traumatica on one skeleton from Viminacium**

Dragana Vulović, Ilija Mikić, Ksenija Đukić, Nataša Miladinović-Radmilović

The Roman city and military camp of Viminacium is situated between the villages of Stari Kostolac and Drmno, 12 kilometres eastwards from Požarevac, close to the confluence of the Mlava and the Danube. During its' history, it became the biggest urban settlement and the capital of the province of Upper Moesia (Moesia Superior), later the First Moesia (Moesia Prima). It represented one of the most important military strongholds, not only in Upper Moesia, but it also represented the area from which Roman legions operated in other provinces as well.

On one of the necropoles of Viminacium, Pećine, in grave no. 5785, skeletal remains of a juvenile male individual were discovered. The funeral took place in the Late Antiquity period. The deceased juvenile was laid on the back with hands clasped on his stomach. The deceased's skull was not found. The orientation of the grave was West–East.

Anthropological analyses revealed a fracture of the right femur followed by myositis ossificans traumatica.

Myositis ossificans is defined as a localised formation of heterotopic non-neoplastic bone in muscle or soft tissue. It usually represents one of the complications of fractures, like in our case here. The trauma to the bone can damage the overlying muscle and, occasionally, the muscle tissue will respond to the trauma by producing bone directly in the muscle tissue itself. This

condition is known as myositis ossificans traumafica (post-traumatic myositis ossificans or myositis ossificans circumscripta) and is most likely to occur in response to trauma in young male individuals, and in the femoral (the quadriceps muscles) or humeral region (brachium muscles).

## **Possible explanations for mass skull burials at Viminacium**

Ilija Mikić, Nataša Miladinović-Radmilović, Dragana Vulović, Ksenija Đukić

Viminacium is located close to the confluence of the Mlava and the Danube, near the village of Stari Kostolac. It represents an extremely complex site with a long history of re-search. There was a large number of necropolises in its surroundings: late prehistoric necropolises with bi-ritual burials, several Roman necropolises, also with bi-ritual burials, as well as several necropolises with inhumation from different medieval periods.

In ancient Viminacium, so far, four graves with mass burial, mainly skulls with a slightly lesser amount of bones from the postcranial skeleton, have been found.

In the archaeological context, there are two funeral practices: incineration and inhumation. Within them, we can distinguish individual, group and mass burials. Under individual burials we comprehend the placing of skeletal remains of one person inside a grave pit, a grave construction, or a built tomb. Group funerals involve the laying of skeletal remains of two or more persons, usually members of one family, who are buried at the same or different period of time, into a grave pit, a grave construction or a built tomb. Mass burials involve the storage of skeletal remains of more individuals, usually at the same period of time, under specific circumstances (massive death toll due to natural disasters, massive death toll as the consequence of various epidemics, as well as massive death toll as a result of armed conflicts, etc.). Secondary mass burials are mostly partial, and much more attention and care is dedicated to the skulls.

On one of the necropolises of Viminacium, Pećine, in grave no. 4924, skeletal remains, mostly skulls, of more than 150 individuals were discovered.

In this paper, we will try to explain this phenomenon, on the example of grave no. 4924, and show all possible causes for mass skull burials at ancient Viminacium.

## **Roman Medicine and Healthcare on the Upper Moesian Limes in Serbia – Archaeological Evidences**

Aleksandar P. Simić, Gordana Jeremić

After the arrival of the Roman army the first professional medics probably made their appearance in the territory of Upper Moesia, predominantly in Singidunum and Viminacium. The means of treatment, and therefore the level of medicine, can be knowledgeable from several different sources, while the most accurate data are those obtained by the archaeological discovery of original medical instruments. In ancient Rome more than 150 different types of surgical instruments have been used. More than 300 medical and surgical instruments of various types so far have been found on the Upper Moesian Limes from Singidunum to Aquae.

Roman citizens in Singidunum (Belgrade) lived in good conditions in both the town and the surrounding villages. From archaeological excavations of the area of canabae and castrum, 28 various medical mainly surgical objects have been found. Also several medical objects have been found in various settlements, smaller fortifications or villae rusticae of ager Singidonensis. Even though at the main castrum of Singidunum no hospital has been discovered yet, just south of Belgrade, epigraphy from auxiliary fort Demessus (Guberevac/Stojnik), at the mining area at Kosmaj, has the word valetudinarium inscribed on it.

Presence of some graves of doctors and pharmacists and their discovered equipment testifies that medical care was at the highest possible level in Viminacium (Stari Kostolac), capital of Moesia Superior. In several tombs in Viminacium many surgical instruments from I to III century have been found. Medical instruments of an eye doctor - "medicus et chirurgus oculusarius" were excavated on the southern city-necropolis.

Downstream from Viminacium several surgical instruments are found on different sites: in Le-

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