

The main aim of the project is complex analysis of the Nasca mummified human bodies from two sites: Cahuachi and Tambo Viejo in the Acari Valley. The Nasca culture flourished on the south coast of Peru from around 100 BC to 800 AD. It is well known thanks to famous geoglyphs of the Nasca desert, which are fully visible only from the air. Despite the great popularity in media and popular scientific literature, the culture is still poorly known. The reason of this is from the one hand insufficient number of archaeological excavations, on the other hand regular plundering of archaeological sites. Most of Nasca artefacts in museums have unknown provenance. Till this day there is only one known and excavated elite burial of the Nasca culture. It is belonging to 10 years old girl from Cahuachi. There is also no big civic/residential centre. Because of that, part of archaeologists working on the Nasca culture thinks that there was no Nasca Empire, only small chiefdoms network, linked by common material and religious culture.

Thanks to convenient natural conditions of the locations of the Nasca settlements, human remains are preserved in very good condition. Despite this, there were never the object of more detailed or complex studies that were published. The Nasca mummies except of good preservation of the soft tissue, have also hair, which are valuable source of information. We do not know till today the method of mummification used in the Nasca culture. It is matter of ongoing debate, are they natural mummies or they were preserved thanks to application of some intentional embalming methods.

Despite of many years of excavations the meaning of Cahuachi archaeological site is still unknown. It is the most important of the Nasca sites. It is still subject of vivid discussion, what was it function. Part of archaeologists thinks that Cahuachi was only a sanctuary and place of pilgrimages. Other claims that it was capital of theocratic state, ruled by priests. Tambo Viejo site is in Acari Valley, outside the main Nasca lands. Probably it was provincial site, conquered by the Nasca people.

Proposed here mummy studies will be confluence of diverse data. There will be conducted anthropological analysis of sex, age and traces on bones, as well as soft tissue pathologies, and infectious diseases. In this part of the research it will be possible also to identified markers connected with social and group status like: artificial cranial deformations and tattoos. Next step is using the non-invasive imaging method: radiography and images in UV light. Thanks to radiography it is possible to observe bones and internal organs without destroying mummies. UV light is used in detecting skin lesions and poorly preserved tattoos. Last part of study will be laboratory research of hair and soft tissue. It is planned to reconstructed the diet by research of the isotopes from the hair. Hair are also helpful to discover consumption of drugs and alcohol. Thanks to macro- and microscopic investigations of the soft tissue it is possible to discovery embalming substance used to stop bodies from decompositions after death, as well as the presence of certain bacterial, viral and parasitic diseases.

The social organisation and live conditions of the Nasca people, despite many years of studies, are still poorly known. Because of devastation and robbery of the Nasca sites as well as methodology of first excavations from the beginning of the 20th century a lot of data are lost. Execution of the project of bioarchaeological analysis of the Nasca mummies can help with improving the current state of the research or it can be even a breakthrough in the studies. The results of the research connected with effects of previous excavations could give us more complex view of the life and functioning of the Nasca society . Thanks to the aforementioned research program it will be possible to reconstruct some of the religious beliefs of the Nasca culture. The Nasca culture did not us left any written sources. Religious practices are possible to reconstruct thanks to iconography, architecture, remains sacrifices and grave goods. Connection of this data with information about human body treatment before and after death would supplement our knowledge of the beliefs about life and the afterlife. Also traces of using hallucinogenic drugs could be linked with some religious functions and beliefs.

Important data could be acquired not only for the studies about the past but also for modern medicine thanks to the research of the soft tissue and hair. Mummies give us unique opportunity to analyse diseases that do not affect human skeleton. This study may contribute to better understanding of evolution of diseases and their spreading during human history.