

Archaeological data on history of medicine in Kazakhstan

The results of archaeological research are applied in many fields of sciences. They are successfully used in geology, mining, metallurgy, paleozoology, anthropology, astronomy, botany and others. Moreover, the development of some sciences depends on the quantity and quality of information gained by archaeology. It includes history of medicine too.

The number of articles related to ancient medicine among numerous data gained by Kazakhstan archaeologists in the field of Culture History is extremely small.

The case of helicoid fracture in the middle part of the diaphysis of the shinbone of left shank was recorded in 1957 in the male burial of V-III centuries BC in Karabie, Kounrad District of Karaganda Region. The bone healed with slight shortening after such a complex a rare fracture but without changing of bone axis direction.

P.Boyev and O.Ismagulov showed medical nature of skull trepanation from the burial mound 1 of the same burial in Karabie in order to treat endocrine disease of a tribal leader, who, probably, double-jobbed military power with priestly functions. They found that surgery on the skull was made with a metal drill in the shape of a spearhead and some metal tool.

Two cases of trepanation, apparently with the purpose of treatment, also relate to Saka period. A woman's skeleton of mature age was found in the burial mound 3 of the tract Sarsha (central Kazakhstan) excavated by A.Kh.Margulan. Two symmetrically holes with a diameter 8,8 – 9,5 mm were revealed at coronal suture of the skull.

A.Kh.Margulan found a skull with a round hole on the coronal suture in one of the mounds of Ulutau mountains.

Trepanation holes had no signs of healing in all the mentioned cases. Therefore, surgical procedure was fatal for patients.

Fatal injury can be judged by the burial of Saka period from the burial mound Kiik-su in Central Kazakhstan. A bronze arrowhead stuck out in the warrior's right shoulder. The stroke of an arrow was such force that it pierced the right side of the chest and its tip stuck in the blade bone. The killed warrior fought in walking battle, as evidenced by the arrow trajectory.

Traces of battle injuries are known according to other data too. The collection of Pavlodar Local History Museum contains human's pelvic bone with plunged bronze arrowhead into it.

Archaeologists have few materials on this theme but target accumulation of such data with participation of specialists in paleopathology will enrich our historical and medical science with specific knowledge about techniques and methods of treating various diseases among the tribes and people who inhabited the territory of Kazakhstan in different historical periods.

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