## MORPHOLOGY OF SELLA TURCICA IN TURKISH ADULTS FROM PAST TO PRESENT

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Morphological aberrations of the sella turcica were assessed in Turkish adults, modern and those of past centuries. Lateral cephalographs taken from 32 adult (23 male, 9 female, Group 1), dry skull base specimens (Late Ottoman Period), and pretreatment cephalographs of 35 adult patients (21 male, 14 female, Group 2) scheduled for orthodontic treatment at Gazi University Orthodontic Clinic were studied. Both samples had Angle Class I relationships. Prevelance of six different morphological types was determined. These include oblique anterior wall, sella turcica bridging, double contour of the floor, irregularity (notching) in the posterior part of dorsum sellae, and pyramidal shape of dorsum sellae. Normal morphology of sella turcica was found in 40.6%, 54.3%, and 47.8% in Group1, 2, and total, respectively. Sella turcica bridging (15.6%) and irregularities of the posterior part of dorsum sellae (18.8%) were more common in dry skulls, while the double contour of the floor (14.3%) and irregularities of the posterior part of dorsum sellae (14.3%) were more common in Group 2. Sella turcica bridging (15.6%) occurred more often in Group 1. There is a noticeable variation in the morphology of sella turcica in this population of normal adults. In approximately one half of the cases, sella turcica was rated as normal and a variety of dysmorphological types was detected. The results can be important when compared with data concerning patients with craniofacial aberrations and syndromes. As bridging of the sella has suggestive associations with disease entities, deviations from the normal anatomy should be evaluated.

Key words: Sella Turcica, cranium, radiography, morphology, lateral cephalometrics, Turkish adults

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## THE ANCIENT HISTORY OF THE GENE POOL OF RUSSIA AND THE CONTIGUOUS COUNTRIES

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Wide opportunities of the geographic method in physical anthropology have been demonstrated by many Soviet anthropologists such as V.V. Bunak , A.I. Yarkho, G.F. Debetz, M.G. Abdushelishvili, V.P. Alexeyev, T.I. Alexeyeva , Yu.G. Rychkov, O.I. Ismagulov, I.M. Zolotareva, etc. Owing to Russia's vast territory, its population is quite diverse in terms of race (two of the 3-5 geographic races – European and Asiatic) and language (six linguistic families). A three-digit number of ethnic groups and scores of anthropological types and linguistic subgroups contribute to a huge genetic diversity. Different attributes of the gene pool and all the variation accumulated over the previous phases of development will be discussed in the multivariate space and in the geographic context of northern Eurasia. The principal component analysis was based on the correlation matrix of independent traits (morphological and genetic) co-varying with economic and cultural attributes. Data were subdivided according to two chronological stages spanning the time from the Paleolithic to the present, and integrated patterns of genetic variation were assessed based on the covariation of independent traits ("historical correlation"). A correlation between the age of the trait and its

distribution area has been established. A marked difference between the gene pools of modern populations of northern Eurasia living west and east of the Urals, reflected in both genetic and morphological traits and prevailing over most part of ancient history (two chronological stages – 26–16 and 15–12 thousand years ago), is unrelated to recent changes in ethnic structure. The results are presented as distribution maps of single traits and of the first principal component.

Key words: Northern Eurasia, genetic polymorphisms, principal component analysis

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## TO THE QUESTION OF DISTRIBUTION OF SPECIFIC INFECTIONS AMONG RURAL MEDIEVAL POPULATION IN RUSSIA: THE CASE OF ROZHDESTVENO CEMETERY (15<sup>TH</sup>–16<sup>TH</sup> CENT. AD)

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Our study was based on the osteological material from a rural cemetery of the settlement Rozhdestveno I (Odintsovo, Moscow region). The material was obtained due to salvage excavations in 2006-2007 under the direction of Mikhail Gonyanyi. The burial site could be dated by the 15th-16th centuries AD according to the mass material and specific artefacts. Totally, 152 burials have been studied. Most of them were redeposited. This fact argues for the prolonged use of the same cemetery clusters partly due to the limitation of the dwellings existing on the border. High percentage of children's mortality (42%) and the analysis of the stress markers on the skeletons of adult individuals permit to suppose the unfavorable living conditions in the community. Both among males and females (totally in 12.6% of cases), there is a complex of features which allows us to speak about a specific infection (treponemal). The most remarkable manifestations were found on the female skeleton (20-29 years old, burial 122). In spite of partial preservation and in some cases taphonomical destruction of the compact bone layer, we found substantial changes of the bone tissue on the long bones of extremities, scapulae and ribs. Proliferate changes of the surface are noted on almost all preserved bones. Acromial processes of the scapulas and outer surface of the 12th rib are covered by porous layers. Also on the upper and lower extremities the regions of periosteal inflammation are marked. On the tibial and femoral bones the process is more manifested. Deep lesion focus (12.6 mm) in the distal part of the left tibia involves the medullar canal and differs from the gummatous destructions on the right tibia. Probably it is a complication of the syphilitic gumma by secondary pyogenic infection, which led to syphilitic osteomyelitis. The presented case is the most expressed and typical for the tertiary syphilis among the investigated material of the Rozhdestveno I site. Written sources testify to the extensive expansion of this disease on the territory of Europe at the end of 15th-16th centuries. It can be confirmed by synchronous findings in Rostov Velikyi, Vologda, Mozhaisk and serves as an evidence of the appearance of venereal syphilis on the territory of Eastern-European lowland.

Key words: palaeopathology, 15th-16th centuries, treponemal infection, medieval Russia

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