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## **Respiratory infections**

## Concha bullosa in paleoanthropological material.

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Concha bullosa is an anatomical variant of ostiomeatal complex in which the middle nasal concha contains pneumatised cells. It leads to its enlargement. The reasons of formation are unclear. The genetic component is suggested especially because the differences in the presence of concha bullosa were observed between populations which originated in different regions of the world and different climatic conditions. Concha bullosa may predispose to diseases of paranasal sinuses. It is a common variation of sinonasal anatomy in the modern population but only a few studies observed it in paleoanthropological material. In the study we analyze the presence of concha bullosa and the coexistence of hypertrophy of the middle turbinate and signs of sinusitis or other pathology of the paranasal complex in population dated on XIX century from Tomersdorf-Toporow. Partly damaged material was excluded from the study. It consisted of 32 skeletons (24 males, 8 females). The sex, age, the stress indexes and presence of pathological signs were assessed, then a CT of the skulls was done. In the analyzed material we found 2 skulls (6,25%) with concha bullosa. In one case the septal nasal deviation was observed. The frequency is lower than in modern populations. Wider research studies are necessary to answer the question about the absence of the concha bullosa in paleoanthropological material: Is it an effect of absence or missing of observation.

key words: concha bullosa, middle turbinates, sinusitis, paleoanthropology

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