

RELATIONSHIPS BETWEEN CLIMATIC CONDITION AND PNEUMATIZATION OF THE FRONTAL SINUSES.

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The frontal sinuses are pneumatic cavities located in the squama frontalis which develop by the pneumatisation extent of some anterior ethmoidal cells. Morphologically, there is a large variability of the frontal sinus shape, size and the position of the intersinus septum. Agenesis of the paranasal sinuses is an uncommon clinical condition that appears mainly in the frontal and maxillary sinuses. In some populations, it appears at a higher proportion. At times when only skull remains are found and other means of identification fails, radiographs of frontal sinus can be used for identification.

The aim of this study was to assess relationship between climatic conditions and pneumatisation and morphology of the frontal sinuses. We analyzed skulls from Poland which represent temperate climate and from Australia, which represent warm climate. In order to assess pneumatisation and morphology of frontal sinuses radiographs were performed in the P-A projection. We observed only few cases of aplasia of frontal sinuses. Two types of sinuses -plane and dentate were observed in both groups. Australian group presented higher level of pneumatisation.