Neurocranial asymmetry from normal shape to pathology

Abstract:

The bachelor thesis deals with the most frequent asymmetry of human skull deformational plagiocephaly. Deformational (positional) plagiocephaly is the deformity of the skull, which is casued by external forces on developing, little rigid, skull of infants. An increased incidence of this deformity was noticed after 1992, when American Academy of Pediatrics marked supine position as the most safe sleeping position for infants, which decreases risk of Sudden infant death syndrome (SIDS). This thesis includes the context of this deformity such as the correct development of the skull, craniosynostosis or torticollis. Craniosynostosis, caused by premature fusion of suture, can lead to similiar resulting shape of the skull. To differentiate craniosynostosis from deformities caused by external forces is very important from the point of clinial view - craniosynostosis can lead to increasing of intracranial pressure and other complications. Expansion of deformational plagiocephaly can be connected in some cases with torticollis, which leads to asymmetrical posture of a head and following confirmation.