

Cranio-cervical posture: a factor in the development and function of the dentofacial structures.

[Solow B.](#) [Sandham A.](#)

Department of Orthodontics, School of Dentistry, University of Copenhagen, Denmark.

Many practitioners will recognize that subjects with a large mandibular plane inclination are characterized by an extended head posture and a forward inclined cervical column, i.e. an extended cranio-cervical posture. It is also typical that subjects with a short-face morphology often carry their heads somewhat lowered, and have a markedly backward-curved upper cervical spine, i.e. cervical lordosis. The aim of the paper is to link together the findings of a series of studies that attempt to clarify this relationship, and bring into focus cranio-cervical posture, which is a functional factor that seems to be involved in many clinical orthodontic problems. To provide a background for the article, the concept of standardized posture of the head and the cervical column is developed, and procedures for recording this posture, as well as categories of cephalometric variables that express the different postural relationships, are described. Findings that relate cranio-cervical posture to upper airway obstruction, to craniofacial morphology, and to malocclusion are surveyed, and a post-natal developmental mechanism that explains the findings and leads to further questions is discussed. Recent findings of a relationship between extended cranio-cervical posture and signs and symptoms of temporomandibular disorders further emphasize the biological importance of this functional parameter.

PMID: 12407940 [PubMed - indexed for MEDLINE]