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Sexual dimorphism in normal craniofacial growth

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ABSTRACT

The purpose of this investigation is to re-evaluate an existing sample of Caucasian individuals, of mostly Northern European ancestry and undefined ethnic origins, who have been characterized as having excellent occlusions and balanced facial proportions (from a subjective assessment). The focus is the emergence of sexual dimorphism in the skeletal and dental relationships. Serial lateral cephalograms of 51 subjects were obtained from the Bolton-Brush Study at ages 6, 9, 12, 14, 16 and 18 yrs. At each age, the records of 16 males and 16 females were selected. Cephalometric evaluation indicated that the length of the anterior cranial base was larger in males but the cranial base angle was similar for both sexes at all age intervals studied. The effective lengths of the maxilla and mandible were similar in both sexes up to 14 years; thereafter in females this length remained relatively constant while in males it increased. The direction of facial growth was similar for both sexes, with a tendency towards a more horizontal growth pattern in females.

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