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The Angle Orthodontist: Vol. 62, No. 3, pp. 185–190.

Facial growth during adolescence in early, average and late maturers

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ABSTRACT

The relative stage of maturity of a child may be determined by comparing the child's hand-wrist radiograph to known standards of skeletal development. Hand-wrist radiographs of 70 adolescents were used to categorize the individuals by skeletal maturation into early, average and late maturation groups using the Fishman SMA method of assessment. The rates of mandibular and maxillary growth relative to the last stages of the pubertal growth spurt were measured. Statistical evaluation of the data was performed using an analysis of variance. The magnitude of change in growth increments of the mandible was greater in the late maturers than in the early or average maturers. Incremental differences in growth between the maxilla and mandible during the last stages of puberty were noted, with the mandible growing significantly more than the maxilla.

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KEY WORDS: Hand-wrist radiograph, Skeletal Maturity Indicator (SMI), System of Skeletal Maturation Assessment (SMA), Stages of Maturation (SMI 1–11), Levels of maturation (Accelerated, average, delayed).