

## The Predictive Value of Short-Term Growth Using Knemometry

Seventy-eight normal school children aged 3 to 16 years were measured with the knemometer at 1, 2, 3, 6, 9 and 12 months. Height was also measured, in the evening between 1800 and 2100 hours. The error of knemometry was 0.18 mm and of height measurement was 0.70 mm. Month-to-month variability in leg-length velocity averaged 2 mm with a range of 1 to 4 mm among these individuals whose monthly mean growth rate was 1.6 mm. The correlation between growth over 1 month and over 12 months in leg length was virtually zero.

Over 6 months to 12 months, it was .84. The correlation between height measured over 12 months and leg length over 1 month was .3; leg length over 3 months, .66, over 6 months, .85 and over 12 months, .89. The authors conclude that a knemometric rate calculated over less than 6 months is useless for assessing what the annual growth rate will be.

Dean HJ, Schentag CT, Winter JSD. *Acta Paediatr Scand* 1990;79:57-63.

**Editor's Comment:** This is a very welcome independent con-

*firmation of the values recently published by Hermanussen and his associates, and confirmed by Wales and Milner in 1987. It is true that the height gain over 12 months was a little better predicted by the leg-length gain over 6 months than by the height gain over 6 months, but this is probably because the error of height measurements is unacceptably high, whereas the error of knemometry is absolutely in line with Hermanussen's values. (It has long been noted by anthropometrists that familiarity breeds contempt.)*

James M. Tanner, MD