Diurnal Variation of Stature in Three Adults and One Child

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ABSTRACT Stature is considered as a reliable measure of physical growth and development and its medico-legal significance is obvious in forensic examinations. The present study reports diurnal variation of stature in three adults and one child. The measurements of stature were recorded four times in a day for 56 days in all the subjects i.e. at 0600 hours, 0800 hours, 1800 hours and at 2200 hours. Significant diurnal variation in stature is observed in all the subjects and stature begins to decrease immediately after rising in the morning. A very rapid decrease in stature occurs within first two hours of the day and further loss continues throughout the day in small amounts. The effect of napping, short term lying down and other postural changes, is discussed. A maximum mean daytime loss of stature up to 2.81 cm is observed. The age and body weight seem to affect the diurnal variation in stature to some extent. The results have important implications regarding current practice in the study of growth, development and nutrition as well as in personal identification.