

British Society for Paediatric Endocrinology and Diabetes

TALL STATURE

As long as a child is well and adequately fed, his or her height including final height is determined almost exclusively by genetic factors. Both parents have an equal effect on the height of their children that is closely related to the midpoint between the relative heights of the parents. Since some children are early and some are late developers the final height cannot be predicted from the relative height of a child at a given age but with the help of a wrist X-ray to show the maturity of the bones, a reasonably accurate prediction of final height can be made.

Effects

Fortunately, tall stature is considered desirable in our society and is statistically linked with high intelligence and even with social success. Nonetheless, some children who are very tall find this embarrassing and nearly all have some difficulties in childhood related to the confusion about age and maturity that arises when a child is taller than their age group. There has been a tendency for the average height of men and women to increase for many generations so the level at which tall stature is considered a problem has also increased. However, there are clearly limits of height beyond which it is difficult to find clothes, and especially shoes, to fit into cars, theatre seats and so on. Opinions vary on the limits of acceptable height but in most tall families a height up to 6ft 5in for men and up to 6ft 0in for women is acceptable.

Investigations

There are some conditions in which growth is increased in childhood, especially those in which there is also early pubertal development, and fewer in which the final height is increased. These conditions can usually be excluded by physical examination and a small number of simple tests including blood tests and the wrist X-ray.

Management

Reassurance from health professionals to the parents and to the child is a very important management aspect. Treatable conditions leading to excessive height should be ruled out. A height prediction is often made to reassure, where possible, the child and family that this is not excessive.

Sex hormones (testosterone in boys or oestrogen in girls) cause fusion of the growing points in the bones of the limbs and spine. These hormones have been given in high dose to limit final height although the long-term side effects of this approach are unknown. The earlier such treatment is started, the more effect on limitation of final height is likely to be, but beyond a certain degree of bone maturity there is little to be gained by treatment. Giving these treatments to children causes early physical development and, it must be remembered, this also has an effect on mental functioning and emotional maturity

The benefits and side effects of medical interventions should be discussed with your doctor. Most often, no treatment is given.

Outlook

Even those children who do find their tall stature a trial throughout childhood generally come to appreciate that it is a positive advantage in adult life. For most tall children reassurance is much the most useful approach.