

**Editor's comment:** Although phenotypically similar, patients with Noonan syndrome have growth patterns distinct from those of patients with Turner syndrome. The mean adult height of male patients with Noonan syndrome is 162.5 cm, and the mean adult height of female patients is 152.7 cm; the latter is almost 10 cm greater than the mean adult height of untreated subjects with Turner syndrome.<sup>1</sup> Romano et al<sup>2</sup> reported that 3/6 males with Noonan syndrome treated with rhGH achieved final heights greater than predicted, but specific data were not provided. In view of the minimal positive effect of rhGH on final height of normal short children,<sup>3</sup> assessment of the role of rhGH treatment in children with Noonan syndrome must be deferred until adult height data are available.

Incidentally, the spontaneous growth pattern of Northern European patients with Turner syndrome recently has been reported.<sup>4</sup> The mean adult height of these subjects was 146.9 cm, approximately 4 cm greater than that reported by other investigators, underscoring once more the importance of ethnic as well as familial genetic factors on growth.

Allen W. Root, MD

1. Ranke MB, et al. *Eur J Paediatr* 1988;148:220-227.
2. Romano AA, et al. *J Pediatr* 1996;128:S18-S21.
3. Schmitt K, et al. *Eur J Pediatr* 1997;156:680-683.
4. Rongen-Westerlaken C, et al. *Acta Paediatr* 1997;86:937-942.

### The Duration of Puberty in Girls Is Related to the Timing of Its Onset

The authors serially took the history of and examined 163 normal girls from age 10 to 15 years, determining the ages at which thelarche developed and menarche occurred. The mean age at menarche was 12.62 years (see Table). The younger the age at thelarche the more prolonged was the interval between thelarche and menarche. There was an inverse relationship between age at thelarche and interval to menarche.

Marti-Henneberg C, et al. *J Pediatr* 1997;131:618-621.

**Editor's comment:** The investigators defined menarche not as the first episode of vaginal bleeding, but as the first menses that was followed by "regular cycles." While this definition is different than the usual one used in the United States, the data are of interest because they address the issue of the tempo of pubertal development and suggest that the later its onset, the more rapid is the progression of sexual maturation. The manuscript utilizes the term "duration of puberty" as the interval between thelarche and menarche. This is misleading as the duration of puberty extends well past this point.

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Age at Menarche and the Duration of Puberty in the Overall Study Sample and the Subgroups Assigned by Age-of-Onset of Puberty

Study Subjects	Menarche Age		Duration of Puberty	
	Mean ± SEM	Range (y)	Mean ± SEM	Range (y)
Total (n = 163)	12.62 ± 0.06	10.25 - 14.41	1.96 ± 0.06	0.25 - 4.25
9 y (n = 22)	11.77 ± 0.15*	10.25 - 12.91	2.77 ± 0.15*	1.25 - 4.25
10 y (n = 53)	12.27 ± 0.10	11.00 - 13.91	2.27 ± 0.10	1.00 - 3.91
11 y (n = 54)	12.77 ± 0.07	11.59 - 14.25	1.78 ± 0.07	0.59 - 3.25
12 y (n = 27)	13.44 ± 0.10	12.42 - 14.41	1.44 ± 0.10	0.42 - 2.41
13 y (n = 7)	13.65 ± 0.09	13.25 - 13.92	0.65 ± 0.09	0.25 - 0.92

Menarche is defined as "regular cycles." Duration of puberty is defined as the period between thelarche and regular cycles.

Correlation (age at onset versus age at menarche)  $r = 0.66$ ;  $P < 0.001$

Correlation (age at onset versus duration of puberty)  $r = 0.62$ ;  $P < 0.001$

\* Stepwise analysis of variance  $P < 0.001$  between groups

From Marti-Henneberg C, et al. The duration of puberty in girls is related to the timing of its onset. *J Pediatr* 1997;131:618-621.