



**【Abstract】 Objective** To analyze the spontaneous growth pattern in Chinese girls with Turner's syndrome (TS), and to make Chinese TS growth curves for clinical practice. **Methods** The pretreatment mixed longitudinal and cross-sectional height, weight and bone age measurements of 253 patients with Turner's syndrome from 8 hospitals of 5 provinces in China were analyzed. The measurements were obtained from patients aged from birth to 30 years. It was required that only one observation should be included per year for one child. A total of 289 height measurements and 106 bone age measurements were obtained. The Chinese TS growth curves were developed by curve estimation and compared with that of the normal girls. Height z scores (HtSDS) of the TS girls were calculated according to the development data of normal girls from 9 cities of China. Weight for height z scores (HtWSDS) of TS patients were calculated according to the patients' actual height and weight. **Results** Mean birth length ( $n = 6$ ) was  $(47.2 \pm 2.5)$  cm, mean height z score (HtSDS) of the birth length was  $-1.52$ . The difference between the mean height of TS and the normal girls of the same age gradually increased from 8.03 cm at the age of 3 years to 27.89 cm at the age of 13 years, it gradually decreased to 18.87 cm at the age of 20 years. Mean adult height was  $(140.0 \pm 7.9)$  cm. The  $\bar{x} \sim (\bar{x} + 2s)$  area of TS patients' growth curves and the  $\bar{x} \sim (\bar{x} - 2s)$  area of the normal growth curves were in the same range before the age of 8 years, which became partly different from 8 years old children and completely different at 13-14 years of age. There was no evidence of a pubertal height spurt in TS girls. Bone age was increasingly retarded, it was less than 2 years below chronological age before 12 years of age and more than 3 years below chronological age after the age of 13 years. Mean HtWSDS of all age groups were above the means of the normal girls except for that of the 4-year-old group, which was  $-0.55$ . Mean HtWSDS of the patients from 9-year-old group to 18-year-old group ranged from  $+2 \sim +2.73$  except for that of the 12-year-old group which was  $+1.97$ . **Conclusion** This study suggested that the difference in the average height between TS and the normal girls of the same age varied with age. No pubertal height spurt contributed to the short stature of TS girls; growth period was longer than that of normal girls. Mean weight of TS patients from 9 years old to 18 years old was above the normal range.