If a lesion is present, surgery is performed to remove the tumor when feasible. Other therapies aimed at destroying pituitary tissue include external irradiation and radioactive implants. New pharmacologic agents have evolved and may be useful in combination with other therapies (Natchtigall, Delgado, Swearingen, et al, 2008). Depending on the extent of surgical extirpation and degree of pituitary insufficiency, hormone replacement with thyroid extract, cortisone, and sex hormones may be necessary.

Nursing Care Management

The primary nursing consideration is early identification of children with excessive growth rates. Although medical management is unable to reduce a patient's height, further growth can be retarded. If treatment for acromegaly is initiated early it improves a patient's chance of maintaining normal adult height. Nurses should also observe for signs of a tumor, especially headache, and evidence of concurrent hormonal excesses, particularly the gonadotropins, which cause sexual precocity. Children with excessive growth rates require as much emotional support as those with short stature.

Precocious Puberty

Concern that the onset of puberty may be occurring earlier has been debated for over 15 years (Carel and Léger, 2008). Traditionally, sexual development before 9 years old in boys and 8 years old in girls would warrant further evaluation (Carel and Léger, 2008). It is now accepted that puberty is occurring earlier than in previous generations (Biro, Huang, Crawford, et al, 2006; Slyper, 2006). The mean onset of puberty was 10.2 years old in white girls and 9.6 years old in African-American girls. Based on these findings, precocious puberty evaluation for a pathologic cause should be performed for white girls younger than 7 years old or for African-American girls younger than 6 years old. No change in the guidelines for evaluation of precocious puberty in boys is recommended. However, recent data suggest that boys may be beginning maturation earlier as well (Herman-Giddens, 2006; Slyper, 2006). Earlier puberty may be directly related to obesity, and