

CPP occurs more frequently in girls and is usually idiopathic, with 95% demonstrating no causative factor (Li, Li, and Yang, 2014; Greiner and Kerrigan, 2006; Nebesio and Eugster, 2007).

Peripheral precocious puberty (PPP) includes early puberty resulting from hormone stimulation other than the hypothalamic GnRH-stimulated pituitary gonadotropin release. Isolated manifestations that are usually associated with puberty may be seen as variations in normal sexual development (Greiner and Kerrigan, 2006). They appear without other signs of pubescence and are caused by excess secretion of sex hormones through the gonads or adrenal glands and may be isosexual or contrasexual. Included are premature thelarche (development of breasts in prepubertal girls), premature pubarche (premature adrenarche, early development of sexual hair), and premature menarche (isolated menses without other evidence of sexual development).

Therapeutic Management

Treatment of precocious puberty is directed toward the specific cause when known. In 50% of cases, precocious pubertal development regresses or stops advancing without any treatment (Carel and Léger, 2008). CPP is managed with monthly injections of a synthetic analog of **luteinizing hormone-releasing hormone** (Greiner and Kerrigan, 2006). The available preparation, leuprolide acetate (Lupron Depot), is given once every 4 to 12 weeks depending on the preparation. With the initiation of treatment, breast development regresses or does not advance, and growth rates return to normal. Studies suggest that not all patients attain adult targeted heights, and the addition of GH therapy may be warranted (Carel and Léger, 2008). Treatment is discontinued at a chronologically appropriate time, allowing pubertal changes to resume.

Nursing Care Management

Both parents and the affected child should be taught the injection procedure. Psychological support and guidance of the child and family are the most important aspects of management. Parents need anticipatory guidance, support, information resources, and reassurance of the benign nature of the condition (Greiner and