

confirmation of testicular torsion ([Gunther and Rubben, 2012](#)). Emergency surgery is often necessary to preserve the testicle.

## **Gynecomastia**

Some degree of bilateral or unilateral breast enlargement occurs frequently in boys during puberty. Approximately half of adolescent boys have transient gynecomastia, usually lasting less than 1 year, which subsides spontaneously with achievement of male development. A careful assessment of the pubertal stage at the onset of gynecomastia; medication history, including anabolic steroids; and the exclusion of renal, liver, thyroid, and endocrine disorders or dysfunction allow the examiner to reassure the adolescent that the changes are pubertal gynecomastia and that no further assessment is indicated. Gynecomastia may also be drug induced; calcium channel blockers, cancer chemotherapeutic agents, histamine<sub>2</sub>-receptor antagonist, and oral ketoconazole medications have all been shown to cause the condition.

If gynecomastia persists or is extensive enough to cause embarrassment, plastic surgery is indicated for cosmetic and psychological considerations. Administration of testosterone has no effect on breast development or regression and may aggravate the condition.

## **Nursing Care Management**

Management usually consists of assurance to the adolescent and his parents that the situation is benign and temporary. However, all adolescents with gynecomastia should receive a careful medical evaluation to rule out pathologic causes. The adolescent may benefit from the knowledge that this condition occurs in more than 50% of all adolescent boys.

## **Health Conditions of the Female Reproductive System**

### **Amenorrhea**

Menarche, or the first menstrual period, occurs relatively late in female pubertal development. Although girls vary in the onset and rate of progression of pubertal development, the sequence and