Polyuria

Polydipsia

Renal colic

Hypertension

Diagnostic Evaluation

Blood studies to identify elevated calcium and decreased phosphorus levels are routinely performed. Measurement of PTH and tests to isolate the cause of the hypercalcemia, such as renal function studies, should be included. If parathyroid adenoma is suspected, imaging using ultrasound and a sestamibi nuclear subtraction study are recommended (Igbal and Wahoff, 2009). Other procedures used to substantiate the physiologic consequences of the disorder include electrocardiography and radiographic bone surveys.

Therapeutic Management

Treatment depends on the cause of hyperparathyroidism. The treatment of primary hyperparathyroidism is surgical removal of the tumor (Lietman, Germain-Lee, and Levine, 2010). Treatment of secondary hyperparathyroidism is directed at the underlying contributing cause, which subsequently restores the serum calcium balance. However, in some instances (such as in chronic renal failure), the underlying disorder is irreversible. In this case, treatment is aimed at raising serum calcium levels to inhibit the stimulatory effect of low levels on the parathyroids. This includes oral administration of calcium salts, high doses of vitamin D to enhance calcium absorption, a low-phosphorus diet, and administration of a phosphorus-mobilizing aluminum hydroxide to reduce phosphate absorption.

Nursing Care Management

The initial nursing objective is recognition of the disorder. Because secondary hyperparathyroidism is a consequence of chronic renal failure, the nurse is always alert to signs that suggest this complication, especially bone pain and fractures. Because urinary