Unexplained convulsions, irritability (especially to external stimuli), gastrointestinal symptoms (diarrhea, vomiting, cramping), and positive signs of tetany are signs of hypocalcemia related to hypoparathyroidism. Nursing care includes institution of seizure and safety precautions; reduction of environmental stimuli; and observation for signs of laryngospasm, such as stridor, hoarseness, and a feeling of tightness in the throat. A tracheostomy set and injectable calcium gluconate should be available for emergency use. The administration of calcium gluconate requires precautions against extravasation of the drug and tissue destruction.

The nurse educates the family about continuous daily calcium and vitamin D. Because vitamin D toxicity can be a serious consequence of therapy, parents are advised to watch for signs that include weakness, fatigue, lassitude, headache, nausea, vomiting, and diarrhea. Polyuria, polydipsia, and nocturia are signs of early renal impairment.

Hyperparathyroidism

Hyperparathyroidism is rare in childhood but can be primary or secondary. The most common cause of primary hyperparathyroidism is adenoma of the gland (Doyle 2016). The most common causes of secondary hyperparathyroidism are chronic renal disease, renal osteodystrophy, and congenital anomalies of the urinary tract. The common factor is hypercalcemia. The clinical signs of hyperparathyroidism are listed in Box 28-9.

Box 28-9

Clinical Manifestations of Hyperparathyroidism

Gastrointestinal

Nausea

Vomiting

Abdominal discomfort