

training to administer this drug during a crisis. Unnecessary administration of cortisone will not harm the child, but if it is needed, it may be lifesaving. Any evidence of acute insufficiency should be reported to the practitioner immediately.

Undesirable side effects of cortisone include gastric irritation, which is minimized by ingestion with food or the use of an antacid; increased excitability and sleeplessness; weight gain, which may require dietary management to prevent obesity; and occasionally, behavioral changes, including depression or euphoria. Parents should be aware of signs of overdose and report these to the practitioner. In addition, the drug has a bitter taste, which creates a challenge.

Because the body cannot supply endogenous sources of cortical hormones during times of stress, the home environment should be stable and relatively unstressful. Parents need to be aware that during periods of emotional or physical crisis, the child requires additional hormone replacement. The child should wear a medical identification bracelet, to notify medical personnel during emergency care.

## Cushing Syndrome

Cushing syndrome is a characteristic group of manifestations caused by excessive circulating free cortisol. It can result from a variety of causes, which generally fall into one of five categories (Box 28-12).

### Box 28-12

#### Etiology of Cushing Syndrome

**Pituitary:** Cushing syndrome with adrenal hyperplasia, usually attributed to an excess of ACTH

**Adrenal:** Cushing syndrome with hypersecretion of glucocorticoids, generally a result of adrenocortical neoplasms

**Ectopic:** Cushing syndrome with autonomous secretion of ACTH, most often caused by extrapituitary neoplasms