

usually develops in the first few weeks of life, causing nonbilious vomiting, which occurs after a feeding. If the condition is not diagnosed early, dehydration, metabolic alkalosis, and failure to thrive may occur. The precise etiology of HPS is unknown. Boys are affected four to six times more frequently than girls ([Hunter and Liacouras, 2016](#)). It is more common in white infants and is seen less frequently in African-American and Asian infants ([Hunter and Liacouras, 2016](#)).

Pathophysiology

The circular muscle of the pylorus thickens as a result of hypertrophy. This produces severe narrowing of the pyloric canal between the stomach and the duodenum, causing partial obstruction of the lumen ([Fig. 22-6, A](#)). Over time, inflammation and edema further reduce the size of the opening, resulting in complete obstruction. The hypertrophied pylorus may be palpable as an olive-like mass in the upper abdomen.

