1999). While most patients with typical symptoms of GERD responsive to empiric therapy do not require endoscopy, patient whose symptoms do not respond to PPI therapy most likely do not have GERD, and further evaluation of their symptoms is needed (Franko TG *et* al., 1998).

Beside GERD, peptic ulcers represent another important disease to be cured by using PPIs, peptic ulcers usually occur in patients with normal acid secretion and gastroduodenal mucosal defenses disrupted because of Helicobacter pylori infection or therapy with non-steroidal anti-inflammatory drugs (NSAIDs). Studies of PPIs have demonstrated superior healing rates, shorter healing time, and faster symptom relief than are obtained with H_2 blockers in these patient (Williams MP *et al*., 1999). PPIs also used to heal peptic ulcers that are refractory even to high-dose H_2-receptor blockers, also they exhibit antimicrobial activity against H.pylori in vitro. The mechanism of this antimicrobial activity is still unclear but may be it is related to inhibition of the urease enzyme produced by H. pylori (Reilly JP *et al*., 1999). PPIs only suppress, antibiotics alone are ineffective in eradicating H. pylori. A combination of adequate acid suppression and antibiotic therapy is necessary for the successful eradication of H. pylori (Humphries TJ *et al*., 1999). The recurrence rate of peptic ulcers after one year is less than 10 percent when using the combination of a PPI and antibiotics for H. pylori eradication (Kuipers EJ *et al*., 1996).

At the same time NSAIDs may cause peptic ulcers because of the inhibition of prostaglandin synthesis and weakening of gastroduodenal mucosal defenses. Uncomplicated ulcers usually heal after discontinuation of NSAIDs and treatment with standard dosages of PPIs, H_2 blockers, or sucralfate (Carafate®). But in case of complicated ulcers PPIs are the treatment of choice, and they may also be used for