BACKGROUND: Peptic ulcer disease (PUD) occurs in up to one fourth of patients with chronic renal failure (CRF). Some of the factors implicated in its causation include hypergastrinaemia, secondary hyperparathyroidism, drugs and, recently, Helicobacter pylori infection. Studies on the latter have been few, with none having been carried out in Kenya. OBJECTIVE: To evaluate the upper gastrointestinal tract endoscopic findings and to determine the prevalence of H. pylori in CRF patients with dyspepsia. STUDY DESIGN AND POPULATION: A prospective study of seventy seven consecutive patients with CRF and dyspepsia compared with consecutive age, sex and socio-economically matched seventy seven controls (no CRF) with dyspepsia. SETTING: Kenyatta National Hospital (KNH), the major referral and teaching hospital, Nairobi, Kenya. METHODS: In both the study population and the controls, upper gastrointestinal endoscopy was carried out. H. pylori was tested for using the biopsy urease test and histology. Patients were considered to have H. pylori if they tested positive on both tests. OUTCOME MEASURES: Findings at endoscopy and presence of H. pylori. RESULTS: Inflammatory lesions (gastritis, duodenitis) (42%) and duodenal ulcers (18.4%) were the commonest findings in the two groups combined. The prevalence of H. pylori in the 154 subjects studied was 54.5%. There was no statistically significant difference between the prevalence of H. pylori in CRF patients (53.2%) and the controls (55.8%) (p = 0.746). Patients with endoscopically proven PUD had a very high prevalence of H. pylori (87.3%) regardless of their renal function status. CONCLUSION: Dyspepsia in patients with or without CRF was due to multiple causes and over 50% were attributable to H. pylori. The prevalence of H. pylori in dyspeptic CRF patients was similar to that in dyspeptic patients with normal renal function.