The Prevalence of Helicobacter Pylori in HIV Positive Patients

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Abstract

Purpose: to determine the prevalence of Helicobacter pylori (HP) in the human immunodeficiency virus (HIV) positive patient.

Methods: A retrospective chart review was conducted at a single tertiary care center involving 522 HIV positive patients. An endoscopic database was searched using the keywords “erythema, ulcer, and ulcerated mucosa” over a ten year period. The upper endoscopy and pathology findings of the included and excluded patients were recorded. The HIV patients excluded from the study did not have recorded pathology in their charts. A total of 106 patients were included in the study. Active HP infection was confirmed by pathology.

Results: The major indications for upper endoscopy were abdominal pain, reflux, nausea, and vomiting which accounted for 70% of cases. CMV was not isolated from any pathology specimens. Forty-seven percent of the HP positive patients presented with dyspepsia. The presence of this symptom could indicate an underlying HP infection. See table 1 for summary of results.

Conclusion: Patients with HIV frequently experience gastrointestinal tract symptoms that may cause significant morbidities. Multiple etiologies have been identified including opportunistic infections, malignancies, and medications. Several international studies have reported an increasing prevalence of HP in HIV patients. A prior study evaluated asymptomatic mucosal infection of the HP in HIV patients. The patients were divided into three groups: pre-HAART, early HAART, and current HAART. When the groups were compared, significant increases were seen over time in mean CD4 cell count, endoscopically positive gastric ulcers and HP infections. The increased frequency of HP infection was common in HIV patients and that the prevalence of HP studies is higher in patients with CD4 cell counts greater than 200/µL. In our study, HP pylori was identified in only a subgroup with a mean CD4 count of 481/µL. With the widespread use of HAART in the United States larger studies are needed to determine if international observations regarding increasing CD4 counts and associated with an increased incidence of HP infection.

Background

*HIV patients frequently experience gastrointestinal tract complaints.

*Multiple causes are found from infection, ulcers, and cancer.

*Previous studies have should H. Pylori infects at higher frequencies in HIV patients with CD4+ counts greater than 200/µL.

Results

*Major indications for endoscopy procedures were abdominal pain, reflux, nausea, and vomiting.

*Major findings were erythema, ulcer, and ulcerated mucosa.

*H. Pylori was present in only 15 of 106 (14%) specimens.

- Major indication for these presentations were dyspepsia

*Retrospective chart review of single tertiary center of HIV positive patients who underwent upper endoscopy.

*Evaluation of endoscopic procedures with erythema, ulcer, or ulcerated mucosa documented.

Demographics, CD4+ count and HAART therapy status documented.

*Inspected pathology for causes of abnormality.

Charts

Pathology Findings (n) Average CD4 Viral Load HAART Yes HAART No HAART Unknown

NON Specific 36 372.5 14155.7 27 7 7
Chronic Inflammation 28 416.6 57489.9 20 4 4
Normal 13 485.0 3952.4 7 5 3
Chronic Inflammation 28 416.6 57489.9 20 4 4
Normal 13 485.0 3952.4 7 5 3
Candida 10 613.9 40.0 8 0 2
Gastropathy 4 500.8 47.0 3 0 1
MAC 1 583.0 410.0 1 0 0
Acute Inflammation 1 200.0 50.0 1 0 0

Conclusion/Discussion

*Majority of pathology findings were non-specific inflammation (34%) followed by chronic inflammation (26%).

*H. Pylori was present in only 14% with an average CD4+ count at 481/µL.

*With the wide spread use of HAART therapy further investigation is needed for incidence of H. Pylori infection.