1. Introduction

Acute dyspepsia is a common gastrointestinal problem in clinical practice. Sometimes, this disorder is usually mentioned as a functional disorder[1]. This disease is due to the poor dietary behavior and there is a scientific evidence that the gastric infection by Helicobacter pylori is the cause of this medical disorder. Here, the authors report on the prevalence of Helicobacter pylori seropositivity among the patients presenting with acute dyspepsia in a primary care center.

2. Materials and methods

This is a descriptive study. Overall 100 naïve cases presenting with acute dyspepsia were included. In this work, the operative definition of dyspepsia is according to the standard ICD10 code, K30 (A disorder characterized by an uncomfortable, often painful feeling in the stomach, resulting from impaired digestion. Symptoms include burning stomach, bloating, heartburn, nausea and vomiting[2]; directly quoted from ICD10Data.com). In all cases, the stool examination showed no occult blood. The H. pylori antibody test was performed in each case under standard immunological technique (Test sensitivity: 90–93%; Test specificity: 95–96%). Descriptive statistical analysis was used where it was appropriate.

3. Results

Of overall 100 cases (65 males and 35 females), the H. Pylori seropositivity can be seen in 34 cases (prevalence rate=34%). Classified by sex, 22 seropositive males (33.8% of overall males) and 12 seropositive females (34.3% of overall females)
of overall females). There was no statistical significant difference between males and females on the ratio of seropositivity (Proportional Z test, $P>0.05$).

### 4. Discussion

In fact, the high seropositivity has been mentioned in some previous reports[1–3]. *H. Pylori* seropositivity can be seen in many cases of acute dyspepsia. The interrelationship between seropositivity and gastric cancer is obvious[2,4–7].

The main clinical practice for management of acute dyspepsia is “test and treat for *H. Pylori* using a validated noninvasive test and a trial of acid suppression[2]”. However, the use of *H. Pylori* test and treatment strategy is not suitable for the initial diagnostic approach for uninvestigated dyspepsia[1]. The use of endoscopy for early diagnosis of gastric cancer is challenging in the area with high prevalence of *H. pylori*.

In our setting, the prevalence is also high but there is still no guideline to clear cut the usage of endoscopy. Nevertheless, an important finding is that the seroprevalence among the patients with acute dyspepsia is about a half of that previously observed among the cases with confirmed peptic ulcer in the same setting[8]. This observation might trigger for further study on the possible relationship between the increased prevalence of infection and increased pathology of the gastrointestinal tract.

In our setting, the prevalence of *H. pylori* seropositivity accounts for averagely one–third of the subjects presenting with acute dyspepsia.

### Conflict of interest statement

We declare that we have no conflict of interest.

### Comments

**Background**

The work reports on study of *H. pylori* seroprevalence in a sample of patients. This topic is interesting and within the scope of tropical infectious disease.

**Research frontiers**

Research frontier of this report is on the scope of gastroenterology and tropical medicine. It is also applied in the scope of immunology. A seroprevalence epidemiology can provide useful data for further referencing.

**Related reports**

Some reports on this area can be seen as cited in the references of the paper. However, the data is still limited in the present setting. This is an interesting seroepidemiology report that can be further applied in tropical immunology.

**Innovations & breakthroughs**

The new innovation is the data on seroprevalence of *H. pylori* which is the important gastrointestinal infection that can be seen worldwide. The issue is interesting for general reader.

**Applications**

Application of this report is on the epidemiology which is the basic concept in tropical medicine and public health. Future citation and referencing to this work when one study on epidemiology of *H. Pylori* can be expected.

**Peer review**

This paper studies *H. pyroli* seroprevalence among patients. This topic is interesting and within the scope of tropical infectious disease. The poor dietary behavior causes acute dyspepsia and the gastric infection by *H. pylori* is the cause of this medical disorder. The issue is worthwhile for general reader.

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