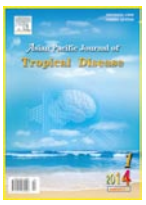
Contents lists available at ScienceDirect

Asian Pacific Journal of Tropical Disease

journal homepage: www.elsevier.com/locate/apjtd



Document heading doi: 10.1016/S2222-1808(14)60484-9

Helicobacter pylori seropositivity among the patients with acute dyspepsia

Beuy Joob[1*], Viroj Wiwanitkit[2]

[1]*Sanitation 1 Medical Academic Center, Bangkok, Thailand*

[2]*Visiting Professor, Hainan Medical University, China; Visiting Professor, Faculty of Medicine, University of Nis, Serbia*

PEER REVIEW

Peer reviewer

Dr. Akkaradej Suyaphan, Mae Jam Hospital, Chiangmai, Thailand.
Tel: 053 485 073
E-mail: akkaradejsuya@hotmail.com

Comments

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.
Details on Page S436

ABSTRACT

Acute dyspepsia is a common gastrointestinal problem in clinical practice. 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.

KEYWORDS

Acute, Dyspepsia, *Helicobacter pylori*

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 (H. pylori)* is the cause of this medical disorder. Here, the authors report on the prevalence of *H. 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"; 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%). Descriptivie 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%

*Corresponding author: Beuy Joob, Sanitation 1 Medical Academic Center, Bangkok, Thailand.
Tel: +66870970534
E-mail: beuyjoob@hotmail.com

Article history:
Received 2 Nov 2013
Received in revised form 7 Nov, 2nd revised form 12 Nov, 3rd revised form 17 Nov 2013
Accepted 22 Dec 2013
Available online 28 Jan 2014

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 might have some limitations in the setting with high prevalence[2,3]. Jung *et al.* said that *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. pyroli* 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.

References

[1] Jung HK, Keum BR, Jo YJ, Jee SR, Rhee PL, Kang YW, et al. [Diagnosis of functional dyspepsia: a systematic review]. [Article in Korean] *Korean J Gastroenterol* 2010; **55**(5): 296-307.

[2] Talley NJ, Vakil N; Practice Parameters Committee of the American College of Gastroenterology. Guidelines for the management of dyspepsia. *Am J Gastroenterol* 2005; **100**(10): 2324-2337.

[3] Talley NJ, Axon A, Bytzer P, Holtmann G, Lam SK, Van Zanten S. Management of uninvestigated and functional dyspepsia: a working party report for the world congresses of gastroenterology 1998. *Aliment Pharmacol Ther* 1999; **13**(9): 1135-1148.

[4] Selgrad M, Bornschein J, Rokkas T, Malfertheiner P. *Helicobacter pylori*: gastric cancer and extragastric intestinal malignancies. *Helicobacter* 2012; **17**(Suppl 1): 30-35.

[5] Carrasco G, Corvalan AH. *Helicobacter pylori*-induced chronic gastritis and assessing risks for gastric cancer. *Gastroenterol Res Pract* 2013; **2013**: 393015.

[6] Sonnenberg A. Review article: historic changes of *Helicobacter pylori*-associated diseases. *Aliment Pharmacol Ther* 2013; **38**(4): 329-342.

[7] Engstrand L, Lindberg M. Helicobacter pylori and the gastric microbiota. *Best Pract Res Clin Gastroenterol* 2013; **27**(1): 39-45.

[8] Sirinthornpunya S. Prevalence of *Helicobacter pylori* infection in patients with peptic disease. *J Med Assoc Thai* 2012; **95**(Suppl 3): S22-S27.