International Journal of Science and Research (IJSR)
ISSN (Online): 2319-7064
Index Copernicus Value (2015): 78.96 | Impact Factor (2015): 6.391

Esofagogastroduodenoscopy Diagnosis in Patients with Dyspepsia Admitted to Endoscopy Ward Wangaya General Hospital Denpasar Bali in 2015

I Made Suma Wirawan

Department of Internal Medicine, Wangaya General Hospital, Denpasar, Bali
Doctoral Program Student of Udayana University Denpasar Bali Indonesia

Abstract: ***Background: The prevalence of dyspepsia patients in the health service covers 30% of general practitioner services and 50% of gastroenterology specialist services. Esofagogastroduodenoscopy used to distinguish between organic and functional dyspepsia. Objective: to describe esofagogastroduodenoscopy diagnosis in patients with dyspepsia symptom who visit endoscopy ward in Wangaya General Hospital Denpasar, Bali in 2015.Design: Descriptive cross sectional study conducted to 341 patients with dyspepsia symptom and performed esofagogastroduodenoscopy in endoscopy ward Wangaya General Hospital Denpasar, Bali during 2015. Result: The age group between 40 to 60 years is the most frequent complaints of dyspepsia (49.55%). The majority diagnosis by endoscopy in dyspepsia patients is gastritis superficialisanthrum (41.05%). Functional dyspepsia encountered in patients with dyspepsia amounted to 4.39%. No H. pylori infection found in gastric carcinoma patient in this study. Conclusion: The most commontesofagogastroduodenoscopy diagnosis in patient with dyspepsia symptom is gastritis superficialisanthrum. The prevalence of H. pylori infection need to be investigated in subsequent studies***

Keyword: esofagogastroduodenoscopy, dyspepsia, H. *pylori*

1.Introduction

Dyspepsia is a common complaint encountered in daily practice and has been known for a long time with the definition continues to evolve, from all the symptoms that come from the upper gastrointestinal tract. Current definition that refers to the Rome III criteria.[1] Dyspepsia is discomfort that comes from the upper abdomen. Discomfort can include one or more of the following symptoms, such as: epigastric pain, burning sensation in the epigastric, full taste after eating. The symptoms happening for at least three months of the onset of symptoms and six months prior to diagnosis. The prevalence of dyspepsia patients in the health service covers 30% of general practitioner services and 50% of gastroenterology specialist services. The majority of Asian patients with uninvestigated dyspepsia and no alarm is functional dyspepsia. Based on the results of research in Asian countries (China, Hongkong, Indonesia, Korea, Malaysia, Singapore, Taiwan, Thailand, and Vietnam) obtained from 43 to 79.5% of patients with dyspepsia is functional dyspepsia.[2] From the results of endoscopy performed on 550 patients with dyspepsia in some centers in Indonesia from January 2003 until April 2004, obtained 44.7% of cases of minimal change in gastritis and duodenitis; 6.5% of cases with gastric ulcers; and normal in 8.2% of cases.[3]

The purpose of this study is to describe esofagogastroduodenoscopy finding in dyspepsia patients who visit endoscopy ward in Wangaya general hospital Denpasar, Bali in 2015.

2.Method

This was a descriptive*cross sectional*study to dyspepsia patients who visit endoscopy wardWangaya Hospital Denpasar Baliin 2015. Patients with symptoms of dyspepsia according to ROME III criteria were included in the study. Patient demographic data is recorded. Do fasting for at least 8 hours prior to the gastrointestinal tract endoscopy. Local anesthetic is done by using xilokain spray within the pharyngeal. Endoscopic procedure using Fujinon endoscopy tool series 2500. All patients sign an inform consent prior to endoscopy.

3.Result

We performed upper gastrointestinal endoscopy to 341 patients who met the criteria of dyspepsia based on ROME III criteria during 2015. By age group, patients with dyspepsia who visited endoscopy room shown in the table 1 below.

Table 1: Patients with dyspepsia by age group

Age interval	n (%)
20-30	35 (10.26)
31-40	58 (17.00)
41-50	87 (25.51)
51-60	82 (24.04)
61-70	48 (14.04)
71-80	24 (7.03)
> 81	7 (2.05)
TOTAL	**341 (100)**

It shown that the age group between 40 and 60 years of the most frequent complaints of dyspepsia (49.55%). Dyspeptic complaints common in the productive age (20-50 years of age) amount 52.77%.

Table 2: Endoscopic diagnosis of dyspepsia Patients in Hospital Endoscopy ward Wangaya Denpasar Bali on 2015

Endoscopy Diagnosis	*N*	*%*
Gastritis Superficialisanthrum	140	41.05
Esophagus variceal	14	4.10
Gastritis Erosive	40	11.73
Pangastritissuperficialis	65	19.06
Peptic ulcer (anthrum)	46	13.48
Suspect gastric carcinoma	4	1.17
Normal esofagogastroduodenum	15	4.39
Duodenal ulcer	10	2,93
Oesofagitiserosive	7	2.05
Total	341	100

Table 2 shown that the majority of endoscopy diagnosis in patients with dyspepsia is gastritis superficialisanthrum (41.05%). We found normal esofagogastroduodenum in 15 peoples ofdyspepsia patients (4.39%). This finding suggests that functional dyspepsia encountered in patients who visit endoscopy ward Wangayahospital Denpasar, Bali in 2015 amounted to 4.39%. We confirmed our endoscopic finding as a gastric carcinoma by biopsy and examined by Pathologist in 4 patients. Two peoples in the age group 51 to 60 years and 2 people in 71-80 years of age group.

4.Discussion

Dyspepsia has been investigated consisting of organic and functional dyspepsia. Organic dyspepsia consisting of gastric ulcer, duodenal ulcer, gastritis erosion, gastritis, duodenitis and malignant process. Functional dyspepsia refers to the Rome III criteria. Rome III criteria have not been validated in Indonesia. Asia-Pacific Consensus (2012) decided to follow the concept of Rome III diagnostic criteria with additional symptoms such as bloating in the upper abdomen that were common as symptoms of functional dyspepsia.[2] Dyspepsia according to Rome III criteria is a disease with one or more symptoms associated with a disorder in gastroduodenal: epigastric pain, burning sensation in the epigastric, full flavor or uncomfortable after eating, a sense of satiety. Perceived symptoms should last for at least the last three months of the onset of symptoms and six months prior to diagnosis. In this study, we found functional dyspepsia 4.39% and amounted to 95.61% of organic dyspepsia.The prevalence of *Helicobacter pylori*infection (H. *pylori)* in patients with dyspepsia who underwent endoscopic examination in various hospitals of medical education in Indonesia from 2003 to 2004 was found to be 10.2%. High prevalence found in Makasar in 2011 (55%), Solo in 2008 (51.8%), Yogyakarta (30.6%) and Surabaya in 2013 (23.5%), and the lowest prevalence in Jakarta (8%) [3] [-6.]Syam AF *et al*found the patients with dyspepsia in Java, Papua, Sulawesi, Borneo and Sumatra, that the prevalence of H. *pylori* infection was 22.1%. Ethnic Papua, Batak and Bugis has a risk of infection with H. *pylori* is greater than the Javanese, Dayak and Chinese. [7]

H. *pylori* infection diagnostic tests consists of a noninvasive such as serology: IgG, IgA anti-Hp, *urea breath test:* 13C, 14C, *fecal stool antigen* and invasive / endoscopic: the appropriate use of the endoscope to take biopsies gastric mucosal tissue for examination test, urease, CLO, histopathological, microbiological culture and *polymerase chain reaction.*[8] Biopsies were taken on the four patients with suspected gastric carcinoma. The results of The Patologist confirmed the gastric carcinoma but not found the existence of H. *pylori* infection in all four of these patients. H. *pylori*colonies bacteria found using Giemsa staining by Pathologist in three patients with peptic ulcer. The eradication done to all patient that positive for H. *pylori* infection using the standard regiment by national consensus standard treatment of dyspepsia and H. pylori infection in Indonesia.

5.Conclusion

Three hundred fourthy one dyspepsia patients based on ROME III criteria was done esofagogastroduodenoscopy during 2015 in endoscopy ward, Wangaya general hospital Denpasar Bali. Majority of dyspepsia patients within the age group 41 to 50 years. The most common diagnoses encountered endoscopically are gastritis superficialisanthrum. We found 4 patients with gastric carcinoma, but no H. *pylori* infection found in all of these patients. Functional dyspepsia diagnosis obtained by 4, 39%. The prevalence of H. pylori infection need to be needs to be investigated in subsequent studies

References

[1] Ford AC, Moayyedi P. Dyspepsia. CurrOpinGastroenterol. 2013; 29: 662-8.
[2] Miwa H, Ghoshal UC, Gonlachanvit S, et al. Asian consensus report on functional dyspepsia. Neurogastroenterol motile J 2012; 18: 150-68.
[3] Syam AF, Abdullah M, Rani AA, et al. Evaluation of the use of rapid urease test: Pronto Dry to detect H pylori in Patients with dyspepsia in Several Cities in Indonesia. World J Gastroenterol 2006; 12: 6216-8.
[4] Hidayati PS, Iswan Abbas Nusi IA, Maimunah U. Relations SeropositivitasCagAH.pylori with Level Gastritis severity on Patient Dyspepsia. Division gastroenterohepatologi Department Science Disease In FK UNAIR - RSU Dr. Soetomo Surabaya; 2013. (Unpublished manuscript).
[5] The amount of data Helicobacter pylori-positive. Hospital Dr. Moewardi Surakarta; 2008. (Unpublished raw data).
[6] Parewangi AML. The amount of data Helicobacter pylori-positive in Makassar. Makassar: dr. WahidinSudirohusodo; 2011. (Unpublished raw data).
[7] Syam, AF,Miftahussurur, M.,Ma'mun, D.,Nusi, IA,Zain, LH,Akil, F.,Uswan, WB,Simanjuntak, D., Uchida, T.,Adi, P. andUtari, AP, 2015. Risk Factors and Prevalence of Helicobacter pylori in Five Largest Islands of Indonesia: A Preliminary Study.*PLoSone,10*(11), p.e0140186.
[8] Testerman, TL and Morris, J., 2014. Beyond the stomach: an updated view of Helicobacter pylori pathogenesis, diagnosis, and treatment.*World JGastroenterol,20*(36), pp.12781-12808.