Uninvestigated Dyspepsia versus Investigated Dyspepsia

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INTRODUCTION

The term “dyspepsia” comes from a Greek word meaning “bad digestion”, or a collection of painful and uncomfortable feelings in the epigastric region.1 In the latest consensus in 1999 in Rome, dyspepsia experts around the world agreed on the definition of dyspepsia as pain or discomfort in the middle upper abdomen. The consequence of this definition is that pain on the left or right hypochondriac region is not considered as dyspepsia.2

Symptoms that often accompany dyspepsia other than pain or discomfort in the epigastrium are as follows: patients feel quickly satiated, and may complain of gassiness, nausea, and vomiting.3 Such symptoms are often found in daily clinical practice, and patients generally recognize it as “maag”. The prevalence rate for dyspepsia in the United States is almost 26%, while the prevalence rate in the United Kingdom almost reaches 41%.4

Diagnostic evaluation of patients with dyspepsia is crucial. Therefore, the terms “uninvestigated dyspepsia” and “investigated dyspepsia” were conceived. By direct definition, uninvestigated dyspepsia relates to patients with dyspepsia that have not been further investigated by endoscopy, while investigated dyspepsia refers to patients with known organic dyspepsia (including gastric or duodenal ulcer, cancer or gastroesophageal reflux disease) or functional dyspepsia (see Figure 1).

Before we evaluate dyspeptic syndrome, we should make sure we are truly dealing with just dyspepsia. We should evaluate whether epigastric discomfort is related to heartburn in the chest and regurgitation, which would suggest Gastroesophageal reflux disease (GERD). And also we should ask whether the pain is reduced by the use of antacids. We should find out whether we are dealing with billiary colic or chest pain due to myocardial infarction. We also should to look for about drugs that the patient often takes. This is important for further evaluation in dyspepsia management.

DYSPEPSIA SYMPTOMS

Symptoms often found in dyspepsia include:
1. Epigastric pain, which is a subjective complaint of uncomfortable sensations. Certain patients state that they feel something wrong in their stomach.
2. Epigastric discomfort: a subjective feeling of discomfort, and not pain.
3. Early satiety: a feeling of fullness at the beginning of a meal, unrelated to the portion of food intake. The patient is usually unable to finish his/her food.
4. Fullness: an unpleasant sensation as if food were withheld in the stomach, which could occur after meals.
5. Gassiness in the upper abdomen, stiffness must be differentiated from distention.
6. Nausea: feeling that they are about to vomit.

These complaints could be recent or might have taken place for several months or years prior to investigation. In general, a length of 4 weeks is considered to rule out temporary symptoms from normal physiologic processes due to an empty stomach.5

CLINICAL APPROACH FOR DYSPEPSIA

The diagnostic approach for dyspepsia requires time and money. Thus, a precise approach should be taken to determine dyspepsia cases that require further investigation, or we could try giving medication beforehand. In dealing with dyspepsia cases, there are several things that could point to further investigation, such as age, symptoms, and helicobacter pylori status.6

The Patient’s Age

Age is an important factor that requires first hand attention. The older patients have higher rate of organic

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disorder. A study by Rani reported to PEGI-PGI-PPHI National Congress in the year 2001 demonstrated the same data, where duodenal ulcer and gastric ulcer were more commonly found in older patients, compared to organic disorders found in studies of uninvestigated dyspepsia.7

The cut-off age is 45 years old. The national consensus for Helicobacter pylori infection eradication established 45 years as the cut-off age for investigation.8 Thus, dyspepsia cases in patients over the age of 45 years with dyspepsia cases require endoscopic examination to rule out possible organic disorders.

HELICOBACTER PYLORI STATUS AND THE USE OF NON-STERoidal ANTI-INFLAMMATORY DRUGS (NSAIDs)

The presence of Helicobacter pylori is closely associated with the development of peptic ulcer. All patients infected by H. pylori in their gaster will suffer from chronic gastritis. This occurs because the microorganism infiltrates cells of the gaster. In several patients, this occurs asymptomatically, but the presence of this microorganism increases the incidence of peptic ulcer and adenocarcinoma of the gastric antrum and corpus.10

A case of peptic ulcer with H. pylori was reported by Syam, et al,11 in a 52-year old woman with complaints of epigastric pain accompanied by nausea, vomiting, anorexia, and gassiness. Endoscopic evaluation demonstrated a peptic ulcer and histopathologic evaluation found Helicobacter pylori.11

The latest study, by Japanese experts, on the relationship between H. pylori infection and the incidence of gastric cancer demonstrate gastric cancer in patients suffering from H. pylori infection, which did not occur in uninfected patients. In addition, patients with H. pylori infection and non-ulcer dyspepsia, gastric ulcer, as well as hyperplastic polip of the gaster also have a greater risk for gastric cancer compared to duodenal ulcer.12

Bearing in mind the complications caused by H. pylori, serologic screening for this infection is rendered necessary. The national consensus on H. pylori infection eradication established H. pylori serologic testing as the initial step for dyspepsia patients in the community as well as for dyspepsia patients undergoing endoscopy (see appendix).

History of the use of drugs that could induce dyspepsia should be inquired about. NSAIDs and aspirin are the main cause for dyspepsia, while steroids, teophyllin and calcium antagonists are less frequent causes of dyspepsia.

The Role of Endoscopy in Dyspepsia

As an investigative tool for dyspepsia, endoscopy is still the gold standard instrument and is superior to radiologic imaging. Endoscopy allows us to see the macroscopic structure of the gastrointestinal tract. If abnormality is found, biopsy can be performed for histopathologic evaluation. In addition, biopsy allows us to obtain samples for rapid urease testing (CLO), Helicobacter pylori culture, and PCR.8 Technological developments of endoscopy allow us to take more optimal therapeutic action.
A study on a large number of cases had been conducted, where study subjects with and without dyspepsia symptoms were examined. Study results confirmed that only cases with duodenitis and peptic ulcer were clearly associated with symptoms of dyspepsia.13

In a study conducted by Rani at Cipto Mangunkusumo Hospital, 44 cases of uninvestigated dyspepsia were evaluated. Endoscopy of these cases demonstrated almost 15% suffered from organic abnormality (peptic ulcer and gastroduodenitis).7

Another study conducted by Syam, et al in Cipto Mangunkusumo Hospital found esophageal abnormality in 32% out of 1017 upper gastrointestinal endoscopy. Out of that number, 81.1% were found in the gaster, while 11.9% were in the duodenum. Duodenal and peptic ulcers were found in approximately 10% of the cases.

CONCLUSION

Dyspepsia is a common disorder with variety of symptoms. Which often found in daily clinical practice. As we know, an organic cause is found in 20-30 % of patients with dyspepsia. Diagnostic evaluation of patients with dyspepsia is crucial. Therefore, the terms “uninvestigated dyspepsia” and “investigated dyspepsia” were conceived. Before we evaluate dyspeptic syndrome, we should make sure we are truly dealing with just dyspepsia. In dealing with dyspepsia cases, there are several things that could point to further investigation, such as age, symptoms, and helicobacter pylori status. And also are there some alarm symptoms such as weight loss, bleeding in the form of hematemesis or melena, dysphagia, continuous vomiting and also epigastric mass. If so, an endoscopic should be performed promptly to determine whether the patient has an organic dyspepsia or not.

REFERENCES