Management of Dyspepsia in the Elderly

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Definition of Dyspepsia

Defining dyspepsia is a somewhat confusing endeavour mainly because the definition itself has varied somewhat over the last few decades. Moreover, the distinction between uninvestigated and investigated dyspepsia is not always clear. Clinically, dyspepsia symptoms must be distinguished from the lower gastrointestinal symptoms of irritable bowel syndrome. Furthermore, the term dyspepsia is often used synonymously for upper gastrointestinal symptoms, but because most experts feel that dyspepsia must be distinguished from gastroesophageal reflux disease (GERD), it does not represent all upper gastrointestinal symptoms.

The Rome II definition of dyspepsia is the most recent and widely accepted. Dyspepsia is defined as a pain or discomfort centred in the upper abdomen. This epigastric discomfort can be associated with other gastrointestinal symptoms such as bloating, feeling full, nausea, early satiety and heartburn. It is important to note that burning sensation in the epigastrium is not heartburn. Rather, heartburn refers to a burning sensation that originates from the epigastric region and radiates up towards the neck. Heartburn alone is not considered dyspepsia according to this definition.

Causes of Dyspepsia

Uninvestigated dyspepsia can be caused by a limited number of gastrointestinal disorders including peptic ulcer disease (duodenal or gastric), non-ulcer or functional dyspepsia (NUD), gastric cancer or GERD. Biliary or pancreatic disease can also cause epigastric discomfort but pain characteristics and associated symptoms easily distinguish these disorders in most cases. The most common cause of uninvestigated dyspepsia, if one excludes heartburn-predominant patients, is NUD, which is diagnosed by disease presentation and a normal gastroscopy. Peptic ulcer disease (PUD) occurs in about 5–15% of cases. Gastric cancer is quite rare in Canada and is usually asso-
associated with alarm features such as vomiting, bleeding, anemia, abdominal mass, weight loss or dysphagia. Esophagitis occurs in varying degrees in dyspeptics, largely depending on whether or not patients with heartburn as their predominant symptom are included. If these patients are not included, as is suggested by the Rome II definition, a lower prevalence of esophagitis would obviously be present.

In the recent Canadian Prompt Endoscopy Study of patients with uninvestigated dyspepsia—including those with heartburn as the predominant symptom—who underwent gastroscopy within 10 days of presentation to their primary care physician, 43% of patients actually had esophagitis. A normal endoscopy was found in 35% who hence suffered from either NUD or endoscopy-negative GERD. Less than 6% had PUD, and none had gastric cancer. Interestingly, the ulcer-like, dysmotility-like and reflux-like classifications did not predict the presence or nature of the endoscopic lesion in this study.

In elderly patients, the prevalence of NUD is lower whereas rates of other conditions are relatively higher. In the Prompt Endoscopy Study, when patients younger than 50 years were compared with those older than 50, the prevalence of clinically significant findings were, respectively: reflux esophagitis 43.4% vs. 43.3%; Barrett’s esophagus, 1.5% vs. 4.0%; gastric ulcer, 2.3% vs. 4.2%; and duodenal ulcer, 2.6% vs. 3.2%. There were 661 patients under the age of 50 and 379 aged 50 and older. There were no cases of gastric adenocarcinoma in any of the groups.

Management Approaches to Dyspepsia

Since dyspepsia is such a common clinical problem, performing an endoscopy in order to clearly define the diagnosis in every patient is not feasible. Several approaches therefore have been suggested in order to provide an initial empiric therapy in those who do not immediately require endoscopy, while endoscopy is reserved for those patients who benefit from this test most.

The past, the recommendation was to place all dyspeptic patients on acid suppressive therapy and to reserve endoscopy for those who did not respond to this therapy. Since the discovery of Helicobacter pylori and its association with PUD, it was felt that providing acid suppression in these dyspeptic patients would delay the more appropriate therapy of PUD. Therefore, the test and treat approach was suggested. Adult patients who were at low risk of having more significant pathology—namely, those without alarm features and who were younger than 45 to 50 years—would have a non-invasive test for H. pylori and subsequent treatment if infection was present, thus treating the PUD appropriately from the start. This approach was first suggested by the European H. pylori Study Group and has since been recommended by several other groups including the Canadian Helicobacter Study Group, and the American Consensus Conference Guidelines on Helicobacter pylori Management. In order to simplify these recommendations, a group of Canadian physicians (Canadian Dyspepsia Working Group) devised a simplified approach to dyspepsia involving five decision points (Figure 2):

1. Exclude other possible causes of dyspeptic symptoms (e.g., cardiac, hepatobiliary, medication-induced) with a thorough history and physical examination.
2. Determine whether any alarm features (vomiting, bleeding, anemia, abdominal mass, weight loss, dysphagia) are present or if the patient is older than 50 years. If the patient has any of these features, an endoscopy should be performed mainly to exclude the rare possibility of gastric cancer. If not, one would continue on to the next step.
3. If the patient is taking non-steroidal anti-inflammatory drugs (NSAIDs), these agents should either be stopped, switched to a cyclooxygenase-2 (COX-2) specific inhibitor, or a proton pump inhibitor should be added.
4. If heartburn is the predominant symptom, the patient should be treated as a patient with GERD.
5. If the patient does not fall into any of the above categories, a non-invasive test for H. pylori should be performed. Urea breath test is preferred because of fewer false-positive results, but serology is acceptable. If the infection is present, it should be treated. If not present, the patient can attempt a trial of acid suppression.

Many studies have shown that this test and treat approach is cost effective since it reduces the number of gastroscopies performed in patients who have uncomplicated dyspepsia. Clinical trials including the Canadian CADET-Hp study have also demonstrated the benefits of this approach.

As mentioned above, it has been suggested that the age limit below which
empiric treatment is recommended should perhaps be increased. The differential diagnosis of patients with uninvestigated dyspepsia above or below age 50 is not tremendously different. In fact, a cost-effectiveness study determined that the test and treat approach was also cost effective in patients aged over 45. How- ever, given the increased risk of gastric cancer, although still very small, most gastroenterologists are reluctant to recommend an empiric approach, particularly if the dyspepsia is a recent development. Patients older than 50 years should therefore be investigated with endoscopy to rule out gastrointestinal pathology.

H. pylori and Non-ulcer Dyspepsia

Although most experts agree on the benefit of H. pylori treatment in uninvestigated dyspepsia (which includes patients with PUD), the use of this therapy in NUD is much more controversial. Many studies, including two recent meta-analyses,16,17 have produced conflicting results. The more recent and inclusive meta-analysis, however, does suggest a small benefit of H. pylori eradication in some patients.17 It may be beneficial to attempt H. pylori therapy in patients with long-standing NUD symptoms with the understanding that the majority of patients will not have symptom relief.

Summary

Uninvestigated dyspepsia, defined as pain or discomfort centred in the upper abdomen, is a common clinical problem that can be attributed to a series of different gastrointestinal conditions including functional dyspepsia, peptic ulcer disease, gastroesophageal reflux disease and, rarely, gastric cancer. Most young adults with these symptoms and without any alarm features can be treated with empiric therapy, as per the CanDys Working Group recommendations (Figure 2). This includes a proton pump inhibitor when heartburn is the predominant symptom and a test and treat approach for H. pylori when it is not. Regardless of age, patients who have alarm symptoms (including vomiting,
bleeding, anemia, abdominal mass, weight loss and dysphagia) require an endoscopy. Elderly (> 50 years) dyspeptic patients without alarm features should also undergo endoscopy—particularly if the dyspepsia is of recent onset—because of the slightly increased risk of gastrointestinal pathology, including Barrett’s esophagus and peptic ulcer, and, although still quite small in Canada, the increased prevalence of gastric cancer in elderly patients.

Dr. Fallone has done consulting work for AstraZeneca, Abbott, Altana Pharma (formerly Byk), Janssen-Ortho and Merck Frosst, Canada.

References


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