

Developing a population predictive model for oesophagitis and gastroduodenal erosions in subjects with uninvestigated dyspepsia

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Oesophagitis, peptic ulcer disease and other gastroduodenal erosions pose a significant risk of morbidity and mortality. An upper gastrointestinal endoscopy is the most accurate approach to detecting a lesion, but it is costly and invasive. Primary care studies have shown that individual dyspeptic symptoms were of little value in predicting a lesion. Furthermore, until recently the prevalence of lesions in the general population and their association with risk factors were unknown. In a population-based sample we estimated the risk of oesophagitis, a peptic ulcer, or other gastroduodenal lesions in people with dyspepsia and reflux symptoms. During 2000-2004, 1069 adults (out of 1533 invited) living in two rural villages near Bologna in Northern Italy, undertook an endoscopy. Participants also had a 13C-urea breath test to detect *Helicobacter pylori*, and completed a validated questionnaire on upper gastrointestinal symptoms, demographics, lifestyle and family and past medical history. Reflux symptoms alone were found to significantly raise the risk of oesophagitis (odds ratio 3.73, 95% confidence interval 2.10-6.62) but not for peptic ulcer or gastroduodenal erosions (1.52, 0.79-2.91). Dyspeptic symptoms with reflux symptoms were associated with an increased risk for both peptic ulcer or gastroduodenal erosions (reflux not predominant symptom: 2.08, 1.06-4.10; reflux predominant 1.93, 1.11-3.36) and oesophagitis (2.27, 1.09-4.71; 3.78, 2.22-6.43). Dyspeptic symptoms alone were not associated with an increased risk of either peptic ulcer or gastroduodenal erosions or oesophagitis (1.31, 0.83-2.74; 1.69, 0.91-3.12). These results, along with lifestyle and demographic factors and *Helicobacter pylori* testing, will inform clinical decision-making in the management of uninvestigated patients with upper gastrointestinal symptoms. Our findings suggest that a new, more appropriate, definition of dyspepsia might be warranted.