An Asian consensus on standards of diagnostic upper endoscopy for neoplasia

Philip Wai Yan Chiu,1 Noriya Uedo,2 Rajvinder Singh,3 Takuji Gotoda,4 Enders Kwok Wai Ng,1 Kenshi Yao,2 Tiing Leong Ang,6 Shiaw Hooi Ho,7 Daisuke Kikuchi,8 Fang Yao,9 Rapat Pittayanon,10 Kenichi Goda,11 James Y W Lau,1 Hisao Tajiri,12 Haruhiro Inoue13

ABSTRACT

Background This is a consensus developed by a group of expert endoscopists aiming to standardise the preparation, process and endoscopic procedural steps for diagnosis of early upper gastrointestinal (GI) cancers.

Method The Delphi method was used to develop consensus statements through identification of clinical questions on diagnostic endoscopy. Three consensus meetings were conducted to consolidate the statements and voting. We conducted a systematic literature search on evidence for each statement. The statements were presented in the second consensus meeting and revised according to comments. The final voting was conducted at the third consensus meeting on the level of evidence and agreement.

Results Risk stratification should be conducted before endoscopy and high risk endoscopic findings should raise an index of suspicion. The presence of premalignant mucosal changes should be documented and use of sedation is recommended to enhance detection of superficial upper GI neoplasms. The use of antispasmodics and mucolytics enhanced visualisation of the upper GI tract, and systematic endoscopic mapping should be conducted to improve detection. Sufficient examination time and structured training on diagnosis improves detection. Image enhanced endoscopy in addition to white light imaging improves detection of superficial upper GI cancer. Magnifying endoscopy with narrow-band imaging is recommended for characterisation of upper GI superficial neoplasms. Endoscopic characterisation can avoid unnecessary biopsy.

Conclusion This consensus provides guidance for the performance of endoscopic diagnosis and characterisation for early gastric and oesophageal neoplasia based on the evidence. This will enhance the quality of endoscopic diagnosis and improve detection of early upper GI cancers.

INTRODUCTION

Upper gastrointestinal (GI) cancers are common cause of cancer death worldwide. The prognosis of upper GI cancers is closely related to the stage of the disease. Generally, the 5 year survival rate for patients with early upper GI cancers exceeds 85%. Patients with early stage upper GI cancers are usually asymptomatic. Endoscopic recognition can be difficult and is a major challenge to clinicians. Currently, there is no global consensus on the use of diagnostic upper endoscopy to recognise and characterise early GI cancers, especially from Asia where upper GI cancers are highly prevalent (approximately three quarters of the worldwide prevalence).1 2 In this paper, we develop an Asian consensus regarding the preparation and application of image enhanced endoscopy (IEE) for the diagnosis of early upper GI cancers.

METHODOLOGY

A professional group was formed by leading Asian endoscopists as a non-government organisation to improve endoscopic diagnosis of early GI cancers through a structured educational programme in Asia. The group organised three meetings to develop a consensus on diagnostic endoscopy for GI neoplasia. The Delphi method was used to develop the consensus statements. The panel of experts was divided into two groups, focusing on upper and lower GI endoscopy, respectively. The upper GI statements are reported here.

First consensus meeting (22–24 January 2016)

The first face to face meeting focused on the drafting of consensus statements on standards of diagnostic upper GI endoscopy in the following areas:

1. Standard preparation for diagnostic endoscopy
2. Endoscopic recognition of early GI neoplasia
3. Endoscopic characterisation of early GI neoplasia.

Initial draft statements were formulated, discussed and agreed by the panel of experts. Each member was assigned to search for evidence for or against the respective statement and to prepare for discussion and voting in the following consensus meetings. The literature search for each statement was conducted on publications in English from scientific databases, including AMED, BIOSIS previews, EBM reviews, Embase, Ovid MEDLINE and Cochrane Trials and systematic reviews.

PICO method for establishment of statements

The PICO method (Problem/Population; Intervention; Comparison; Outcome) was employed to identify the appropriate intervention and standards for the conduct of diagnostic endoscopy, focusing on the detection and characterisation of early GI neoplasia as a clinical outcome. All statements were established following the PICO worksheet (figure 1) (see online supplementary 1).