Background Cultural, local dietary and social factors, the frequency of malignancy in the population studied are known to affect the epidemiology of dyspepsia. Clinical features are highly unreliable in determining the aetiology of dyspepsia. Alarm features are known to help in identifying underlying malignancy in patients with dyspepsia. However, very few studies are available from Asia validating the role of alarm features in dyspepsia.

Methods 900 consecutive patients with dyspepsia were included in the study after recording relevant clinical details such as symptoms, duration, age, weight and alarm features. All patients underwent standard upper gastrointestinal endoscopy, and the findings were recorded. All suspected malignancies were confirmed with histopathology. All malignancies and alarm features were statistically analysed using chi-square test for non-parametric data while ANOVA and students T-test were used for parametric data.

Results On endoscopy, malignant lesions were seen in 5.5% of our subjects whereas alarm features were present in 22.9% of our subjects. Among the malignant lesions, esophageal malignancy was seen in 2.2%, gastric malignancy in 3.1% with the rest being a duodenal malignancy. All the alarm features put together had a sensitivity and specificity of 92% and 81.2% respectively for predicting malignancy. Highest sensitivity and specificity was for weight loss (76%) and supraclavicular lymph nodes (99.8%) respectively. Based on ROC curve the optimal age to begin malignancy screening was 46.5 years.

Conclusions Alarm features are a reasonable and effective tool for identifying upper gastrointestinal malignancies in patients with dyspepsia. Amongst all the alarm features weight loss is the best screening tool. The appropriate age to begin screening for malignancy appears to be 46.5 years.