A SCORING SYSTEM FOR OUTPATIENT IMPROVEMENT IN THE DIAGNOSTIC YIELD OF UPPER GASTROINTESTINAL ENDOSCOPY

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Background With the widespread availability of diagnostic procedures, it has become necessary to evaluate the efficacy and appropriateness, especially with regard to gastrointestinal endoscopy (upper and lower). Many centres have adopted an open-access referral policy, resulting in increased costs, waiting times and clinical workload. Attempts have been made to rationalise resources, by using limited indications. Diagnostic accuracy for dyspepsia is only 40%–50%. We planned to develop a scoring system which would help in differentiating disease from non-diseased and improve the diagnostic yield of upper gastrointestinal endoscopy.

Methods A total of 150 patients from the outpatient and inpatient departments of a tertiary care hospital in north India over 2 years were included. The clinical history and examination of the patients were recorded on a performa. The examination was undertaken by a standard forward-viewing fibre optic endoscope using topical anaesthesia by the consultant. The outcome of the endoscopy was categorised as positive if there was a significant finding. Less severe and equivocal findings such as gastritis, duodenitis were not considered positive for this study. Logistic regression (forward LR score) was used; the coefficient of regression was used to assign a score for each symptom.

Results Pain was the most common symptom; in 110 patients (77.3%) the endoscopy showed no significant findings. Significant findings were seen in 34 patients; diagnostic yield=22.7%. Clinical features like weight loss, hemaemesis, malena, dysphagia, anaemia, abdominal distention, ascites and abdominal lump significantly discriminated and pointed towards a positive endoscopic finding. The pain was not a good discriminating factor; dysphagia, the presence of ascites and the presence of abdominal lump independently predict significant endoscopic findings. At a total score of 4 or less we can avoid doing endoscopy in 75 (50%); as the score increase the sensitivity decreases while the specificity increases. At a score of 5 the sensitivity=82% and specificity=71%. All 11 malignancies had a score=5 or more.

Conclusions Our findings suggest how the selection of patients for endoscopy can be improved. It also provides a basis for prospective studies which can lead to better use of resources in future.