AB136. 194. The use of clinical parameters as adjuncts to endoscopic evaluation of mural thickening on conventional computed tomography in diagnosing malignancy

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Background: The identification of mural thickening (MT) on computed tomography (CT) poses a difficult diagnostic dilemma especially in the absence of clear guidelines. The aim of the current study was to retrospectively analyse conventional CT reports, identifying those patients in whom gastrointestinal wall MT was observed, and correlate these reports with subsequent endoscopic evaluation.

Methods: We reviewed the reports for patients who had thoracoabdominopelvic CT or isolated abdominopelvic CT performed between January 2016 and December 2017 retrospectively. Where patients were identified as having MT of the oesophagus, stomach or colon, results of subsequent endoscopic evaluations were documented. Only patients with reports of MT who had follow-up endoscopy (oesophagoduodenoscopy, colonoscopy, sigmoidoscopy) were included in the study (n=308).

Results: We divided the cohort into upper and lower gastrointestinal mural thickening cohorts (UGIMT & LGIMT respectively). Overall 55.71% (n=122) of colonoscopies and 61.8% (n=55) of gastroscopies were normal. Haemoglobin was found to be an independent factor with MT in both arms of the study in predicting neoplastic lesions (P=0.04 I.E, P<0.05, P<0.001 LGIMT cohort). Age was also found to be a statistically significant parameter in both UGIMT and LGIMT cohorts (P=0.02 I.E P<0.05, P<0.001 respectively).

Conclusions: This study indicates that Haemoglobin values and age are potentially useful adjuncts to Mural thickening in predicting carcinoma in Upper and Lower Gastrointestinal malignancies. It also indicates the need for robust criteria when contemplating endoscopic evaluation to investigate patients with CT evidence of mural thickening, especially in those patients who are asymptomatic. This can only serve to guide clinicians, reduce potential complications associated with endoscopy and ensure proficient use of limited resources.

Keywords: Age; carcinoma; computed tomography (CT); haemoglobin; mural thickening

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