

1325P Prognostic importance of lymph node (LN) yield after curative resection of gastroenteropancreatic neuroendocrinetumours (GEP NETs)

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Background: Surgery is the main stay of treatment for GEP NETs, but there is no consensus on optimal number of resected LNs. The effect of LN status and yield on relapse-free (RFS) and overall survival (OS) in patients (pts) with resected GEP NETs were evaluated.

Methods: Data on pts who underwent curative resection for GEP-NETs (Jan 02-Mar 17) were retrospectively analysed. Grade III tumours (Ki67>20%) were excluded. Kaplan-Meier and univariate/multivariable Cox-proportional hazard analyses were performed. Cut-point analysis was assessed to distinguish a binary categorisation of total LNs retrieved associated with RFS.

Results: Of 217 pts, median (med) age was 59 yrs: 51% male. Primary tumour sites: small bowel (42%), pancreas (25%), appendix (18%), rectum (7%), colon (3%), gastric (2%), others (2%); grade 1 (G1): 77%, G2: 23%. LN cut-point value associated with RFS was 8; ≥8 LNs were retrieved in 106 pts, <8 in 45, and 0 or no record/documentation of LN retrieval in 66. Relapse was reported in 50 pts; 35 deaths. Med follow up times for all pts were 41 months (95% CI 36-51) and 71 months (95% CI 63-76) for RFS and OS respectively. On univariate analysis, there was no effect of LN ratio (number involved/number retrieved) on RFS: p = 0.1 or OS: p = 0.75. On univariate analysis, tumour necrosis (p = 0.021) and perineural infiltration (p = 0.016) were the only two variables significantly associated with OS; G (p = 1), TNM staging (p = 0.19) and surgical margin (p = 0.69) were not significantly associated with OS. Multivariable analysis for RFS included 4 variables of interest: perineural infiltration, LNs retrieved, positive LNs and localisation (Table).

Variable	Hazard Ratio	(95% CI)	p
Perineural infiltration	1.46	(0.74 - 2.69)	0.277
≥8 lymph nodes retrieved	2.70	(1.07 - 6.84)	0.036
Any lymph nodes positive	2.71	(0.88 - 8.30)	0.081
Pancreas (relative to 'other')	27.33	(2.54 - 294.08)	0.006
Small Bowel (relative to 'other')	32.44	(2.92 - 360.58)	0.005

Conclusions: Removal of ≥ 8 LNs is associated with greater risk of relapse in G1 & G2 GEP NETs; localisation also has a significant association with RFS, necessitating stricter surveillance. Larger prospective studies are required to validate these findings.

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