C-44

Prognostic Impact of a Large Mesenteric Mass > 2 Cm in Ileal Neuroendocrine Tumors

Yosuke Kasai[1]; Kelly Mahuron[1]; Kenzo Hirose[1]; Carlos Corvera[1]; Grace Kim[1]; Thomas Hope[1]; Brandon Shih[1]; Robert Warren[1]; Emily Bergsland[1]; Eric Nakakura[1]

[1]University of California, San Francisco

BACKGROUND: Ileal neuroendocrine tumors (i-NETs) frequently metastasize to mesenteric lymph nodes and the liver. Regional lymphadenopathy is associated with desmoplasia of the mesentery causing a large mesenteric mass (LMM). Although the latest AJCC TNM staging (8th edition) defined LMM > 2 cm as N2, the prognostic impact of LMM is ill-defined. We evaluated whether LMM is prognostic for patients with i-NETs.

METHODS: This single-institution, retrospective cohort study included 106 patients who underwent resection of i-NETs between 2007 and 2018. LMM was defined as a mesenteric mass > 2 cm on preoperative imaging. Overall survival (OS) and liver-progression-free survival (LPFS) were compared between patients with and without LMM.

RESULTS: LMM was present in 62 patients (58%). LMM did not correlate with the presence/absence of liver metastasis (P= 0.680) or the extent of liver involvement (P= 0.962). OS and LPFS differed significantly between patients with and without LMM (5-year OS rates of 63.6% and 94.9%, respectively, P= 0.022; 3-year LPFS rates of 42.4% and 67.0%, respectively, P= 0.031). In multivariate analysis, LMM (hazard ratio: 4.59, 95% confidence interval: 1.52-17.6), liver involvement ≥ 25% (5.69, 1.71-16.8), and grade 2 (5.48, 2.06-16.5) were independent prognostic factors for OS, while LMM (1.94, 1.09-3.60), presence of liver metastasis of any extent (3.78, 1.76-9.06), and grade 2 (2.22, 1.23-4.01) were independent prognostic factors for LPFS.

CONCLUSION: LMM > 2 cm is prognostic for OS and LPFS, and represents aggressive tumor biology.