

## **Incidence of Nodal Positivity in Appendiceal Neuroendocrine Tumors (NETs) and Its Effect on Survival**

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**Background:** NETs of the appendix are rare neoplasms most often discovered during incidental appendectomy. We determined the incidence of nodal positivity and its effect on survival in primary NETs of the appendix.

**Methods:** Data from all patients diagnosed with a primary appendiceal NET was queried. Patients that underwent appendectomy and/or right hemicolectomy were included. Patients diagnosed with goblet cell carcinoid or appendiceal adenocarcinoma, or those with inadequate data were excluded.

**Results:** Forty-eight patients met inclusion criteria (5/1998 - 2/2014). Twenty-five percent of patients (12/48) had tumors less than 1 cm in size, thirty-five percent (17/48) had tumors between 1 and 2 cm in size, and forty percent (19/48) had tumors greater than 2 cm in size. Lymph nodes were positive in 38% of overall patients (18/48). 42%, 29%, and 42% of patients had positive lymph nodes in tumors less than 1 cm, 1-2 cm, and greater than 2 cm, respectively. Median, 5-year and 10-year Kaplan-Meier survival sorted by nodal involvement is shown below. Survival sorted by nodal involvement sub-sorted by tumor size was also calculated. Survival sorted by presence of lymphovascular invasion, perineural invasion, or

mesoappendiceal invasion was found to be statistically insignificant.

	<b>Positive Lymph Nodes</b>	<b>Negative Lymph Nodes</b>
N	18/48	30/48
Deaths	2/18	1/30
5-year Survival	94%	96%
10-year Survival	81%	91%

**Conclusions:** Patients with appendiceal NETs experience high 5- and 10-year survival rates. However, nodal positivity adversely impacts survival only in well-differentiated appendiceal NETs.