Treatment of Small Bowel Neuroendocrine Tumors (NETs) in a Multidisciplinary Specialty Center Increases Survival


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Background

Neuroendocrine tumors (NETs) of the gastrointestinal tract are rare, slow-growing neoplasms. While surgery and somatostatin analogs are the mainstays of treatment, we hypothesize that aggressive, long-term multidisciplinary management will improve treatment outcomes and maximize survival.

5-Year Survival Rates for Patients with Metastatic Small Bowel NETs by Institution

Methods

The charts of 401 patients with well-differentiated, small bowel NETS, treated by our multidisciplinary NET specialty team, were reviewed. Information relating to the extent of disease and all tumor-related surgeries was collected from the patient records. Kaplan-Meier survival curves were generated. 5-year, 10-year, and median survival rates were calculated and compared to other single institutions and to the national Surveillance Epidemiology and End Results (SEER) database.

Results

Our multidisciplinary NET clinic saw 14 patients with local disease, 68 patients with regional disease and 319 patients with distant disease. Our clinic patients had higher survival rates when compared to the national SEER database and to other single institutional reports. The data for our clinic versus the SEER database is presented in the table below.

Survival for Patients with Small Bowel NETs

<table>
<thead>
<tr>
<th>Author, Institution*, Year Published</th>
<th>Regional N=68</th>
<th>Distant N=319</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median Survival (months)</td>
<td>3-Year Survival Rate</td>
</tr>
<tr>
<td>LSUHSC/OMCK</td>
<td>Not yet reached</td>
<td>97%</td>
</tr>
<tr>
<td>SEER (NANETS)</td>
<td>107 mo.</td>
<td>83%</td>
</tr>
<tr>
<td>Difference</td>
<td>-----</td>
<td>14%</td>
</tr>
</tbody>
</table>

Survival Curves From Histological Diagnosis (SEER vs. LSUHSC/OMCK)

Patients with Distant Disease

Conclusion

Survival rates seen in this study are objectively higher than compared to those seen in SEER and other single institutional reports. We believe that our data represents the largest single institutional study to date and supports a multidisciplinary specialty approach to NET care. Future research should be done to investigate this concept.

*SI: Single Institutional Study
NR: Not reported

LSUHSC/OMCK

SEER

P<.001

P=.004

P=.001