ASO Author Reflections: Pancreatic Invasion is a Crucial Independent Prognostic Factor in Duodenal Carcinoma

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PAST

Duodenal carcinoma (DC) is an uncommon tumor. Lymph node metastasis is reported to be an acceptable predictor of a poor survival,¹ whereas the other prognostic factors of DC remain unclear because of their rarity. Among periampullary malignancies, pancreatic invasion is reported to be a prognostic factor in ampulla of Vater carcinoma and distal bile duct carcinoma.^{2,3} However, few reports have described the influence of pancreatic invasion on survival in DC. The prognostic impact of pancreatic invasion for DC patients had not been fully investigated.

PRESENT

This study retrospectively analyzed 86 patients with DC, including 18 patients with pancreatic invasion who underwent surgical resection. The median survival time for these DC patients with pancreatic invasion was 25.7 months, which was significantly worse than that for the patients who had T2 or deeper DC without pancreatic invasion ($p = 0.010$). The multivariate analysis showed that the independent prognostic factors were pancreatic invasion (hazard ratio [HR], 7.59; $p = 0.019$) and lymph node metastasis (LNM) (HR, 5.01; $p = 0.026$). The median survival time for the DC patients with pancreatic invasion did not differ significantly from that for the resectable pancreatic head carcinoma patients treated without adjuvant chemotherapy ($p = 0.135$).⁴

FUTURE

Surgery alone seems to be an inadequate approach for achieving a long-term survival for DC patients with pancreatic invasion considering the poor survival outcomes, which may suggest the utility of adjuvant chemotherapy as observed in pancreatic carcinoma. An ongoing randomized phase 3 trial of adjuvant chemotherapy for patients with small bowel carcinoma may lead to the advancement of multidisciplinary treatment for DC patients.⁵

DISCLOSURE There are no conflicts of interest.

REFERENCES

1. Meijer LL, Alberga AJ, de Bakker JK, et al. Outcomes and treatment options for duodenal adenocarcinoma: a systematic review and meta-analysis. *Ann Surg Oncol*. 2018;25:2681–92.
2. Imamura T, Yamamoto Y, Sugiura T, et al. The prognostic relevance of the new 8th edition of the Union for International Cancer Control Classification of TNM Staging for Ampulla of Vater Carcinoma. *Ann Surg Oncol*. 2019;26:1639–48.
3. Ebata T, Nagino M, Nishio H, Igami T, Yokoyama Y, Nimura Y. Pancreatic and duodenal invasion in distal bile duct cancer: paradox in the tumor classification of the American Joint Committee on Cancer. *World J Surg*. 2007;31:2008–15.
4. Nitta N, Ohgi K, Sugiura T, et al. Prognostic impact of pancreatic invasion in duodenal carcinoma: a single-center experience. *Ann Surg Oncol*. 2020. <https://doi.org/10.1245/s10434-020-08512-8>.
5. Kitahara H, Honma Y, Ueno M, et al. Randomized phase III trial of postoperative chemotherapy for patients with stage I/II/III small bowel adenocarcinoma (JCOG1502C, J-BALLAD). *Jpn J Clin Oncol*. 2019;49:287–90.