

Journal Watch

Prognostic factors in pancreatic carcinoma: serum LDH levels predict survival in metastatic disease.

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Abstract:

In this study, our aim was to investigate the impact of various prognostic factors on survival in patients with pancreatic carcinoma. The group consisted of 127 cases with adenocarcinoma histologically confirmed. The patients had a median age of 58 years, and 81 (64%) were male. The median survival time of the whole group was 7 months, and the 4-year survival rate was 18%. The median survival duration of the patients without metastases was 8 months, and the survival rate at 1 year was 37.5% and 7.2% at 5 years. It was associated with improved survival compared with the cases with metastatic disease ($p < 0.0001$). In univariate analysis, decreased performance status ($p = 0.0009$) and unresectability of tumor ($p < 0.0001$) were associated with poor outcome. However, only surgery was found to be a statistically significant parameter in multivariate analysis ($p = 0.002$). The median survival duration of patients with metastases was 5 months, and the 1-year survival rate was 10%. Age younger than 60 years ($p = 0.04$), decreased serum hemoglobin levels ($p = 0.04$), and elevated lactic dehydrogenase (LDH) levels ($p = 0.0001$) were associated with a significantly shorter survival rate. In the Cox model, a high serum LDH level was the only independent unfavorable prognostic factor ($p = 0.001$). In conclusion, surgical intervention in the group without metastases and serum LDH levels in the group with metastases were the most important prognostic factors influencing survival. Pretreatment serum LDH determinations may provide a useful means of stratifying patient populations when comparing treatment programs for advanced pancreatic cancer.

Comments:

Strengths/uniqueness:

The first report of lactic dehydrogenase (LDH) as one the independent prognostic factor for the advanced pancreatic cancer population, which is consistent with the previously reported prospective study for advanced lung, breast, and gastrointestinal tract cancer population. (Vigano A, et al. 2000)

Weaknesses:

- 1) Retrospective, single-institutional study. Vague statement regarding inclusion criteria and the length of the follow-up period.

2) Treatment protocol for metastatic pancreatic cancer patients may vary in different settings.

Relevance to Palliative Care:

- 1) It is useful for us to be aware of this simple marker as a possible independent prognostic factor for advanced pancreatic cancer patients.
- 2) Although multivariate analysis failed to show older age (>60) as a better prognostic factor for advanced pancreatic cancer population, it would have been interesting to see what univariate analysis would have showed. (We often encounter longer survival in elderly female patients with advanced pancreatic cancer.)