

Copeland inquired, "Why have we not improved survival by reducing local recurrence?" I did not see an answer to this question.

I know of no question of more importance to surgical oncologists. Every stroke of the surgeon's knife is affected by his or her perception of this dilemma. I have suggested an explanation, which no surgical journal has agreed to publish.² Do Brennan and Copeland agree with my suggestion or do they have an alternative explanation?

References

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Dear Editor:

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Dr. Evans raises the issue of why survival is not improved by reducing local recurrence. This is not unique to soft tissue sarcomas; it is reported for many other malignancies, including breast, rectum, and lung. We are sure that Dr. Evans is not saying that local control is not important, because obviously many patients with sarcoma are cured by the first surgical procedure without any other effective therapy.

We have reviewed the article that Dr. Evans refers to (Evans RA. *South Med J* 1989; 82:1534-1537). In that article, he suggests a hypothesis to explain why local recurrence is not a predictor of survival. He points out that local recurrence may be a simple manifestation of disseminated disease or the consequence of inadequate primary treatment. Dr. Evans suggests that patients vary widely in their ability to destroy circulating tumor cells. He then makes the extrapolation that patients with a "... weak system of host resistance have metastases very early and die of disseminated disease; patients who survive their initial lesion without having distant disease have a higher host-resistant threshold." Dr Evans suggests that this hypothesis "illustrates why promptly treated locally persistent breast cancer does not decrease patient survival."

We would not question the value of either surveillance or host resistance to metastases. We would, however, question that it is the sole answer to why local recurrence does not have an influence on survival. Many sarcomas have an extremely low potential for metastasis, and this can be adequately described by review of the histologic grade and subtype, which in our current study, were adequately stratified.

In his article, Dr. Evans also stresses that "NK cytotoxicity levels are steady throughout life; survivors would be expected to have very high NK levels." We are unfamiliar with any determinations of NK levels in patients with soft tissue sarcoma. We are, however, pessimistic that such a simple analysis would predict outcome, when numerous other factors of the tumor do so. Our recent demonstration (Cance et al. *N Engl J Med* 1991; 323:1457-1462) that loss of gene products associated with tumor suppression are strong indicators of survival would be just one of the many potential variables.

We appreciate Dr. Evans' addressing the issue, but for the moment we would suggest that the failure of local recurrence

to predict survival is at least as tumor-dependent as it is host-dependent.

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Dear Editor:

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I read with interest the paper by Williard et al. on "Comparison of amputation with limb-sparing operations for adult soft tissue sarcoma of the extremity," the latest analysis of the excellent data on soft tissue sarcomas treated at the Memorial Sloan-Kettering Cancer Center.¹ Much of the discussion revolved around the important issue of whether local tumor recurrence is associated with an increased risk of metastatic spread and subsequent death from disease. The authors rightly state that there is no evidence of such a link from their data. What they fail to state is that their data could not demonstrate a link, even if it were quite substantial, because of the relatively small numbers of patients compared and the form of statistical analysis employed.²⁻⁴ The authors have ignored the proper, established statistical approaches to this difficult problem. They have thereby allowed themselves to make some misleading statements that suggest that local recurrence cannot, in general, influence survival.

Patients with malignancy that has metastasized at the time of primary treatment will be unlikely to suffer significantly from the further metastatic potential of residual/recurrent local disease. A large proportion of those treated for primary high-grade soft tissue sarcoma or breast cancer are in this situation. As the authors state, their outcome will be dependent on effective systemic treatment. Patients with small tumors, however, such as those breast cancers diagnosed while still asymptomatic, as a result of mammographic screening, may not have developed metastases at the time of treatment. For these patients, residual disease or second primary tumors become more important, and effective local treatment is likely to determine their long-term outcome. We must not ignore the possible metastatic potential of local tumor because some patients, particularly those with early disease at the time of first diagnosis and treatment, would suffer.

References

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