

Does surgery induce angiogenesis in breast cancer? Supporting evidence from Africa

Dear Editor

Retsky et al.¹ have made a possible induction of angiogenesis by surgery in young women with breast cancer. Our clinical experience with managing young breast cancer patients in Africa seems to support these observations. All our patients are usually unscreened and over 70% are under the age of 45 years. In one institution, the 5-year survival was as low as 15% with most of the deaths occurring within the first 24 months.² Furthermore, in late stage breast cancer, we have also observed unexplained rapid deterioration and death following palliative surgery and chemotherapy.³ In the light of the study by Retsky et al., these observations may be related to molecular events triggered by surgery and/or chemotherapy.

I agree with this study that we need to know for sure if we are hastening young women's death without "curative surgeries". The key weakness of this study is the fact that it is retrospective, and the evidences used are indirect. To give strength to their observations, there is an urgent need for case controlled, clinical and molecular studies to outline the exact role of angiogenesis in post-surgical breast cancer recurrence and mortality. Considering the heterogeneous nature of breast

cancer, we need to also look at other prognostic molecular markers to see if surgery up-regulates them as well.

I do not agree that we have enough evidence to change or reconsider our practice as regards early detection and surgical management of young women with breast cancer. We need to await further multicenter, prospective case controlled studies to make such moves.

References

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Surgery-induced angiogenesis

Dear Editor

I read with great interest the paper by Retsky et al. (2005) published in the IJS.¹ The authors present impressive data suggesting that the mammography paradox of breast cancer screening and the early postoperative relapses in younger women are due to surgery-induced angiogenesis in these tumours. Angiogenesis (or neovascularization) is the process whereby new vasculature is recruited

from pre-existing vessels² and there is no doubt that a stimulation of the angiogenic process can increase the rate of tumour growth.³

Retsky et al. (2005) used computer simulations to analyze data from 1173 pre- and post-menopausal, node-negative and positive breast cancer patients treated by surgery alone and with 16–20 years follow-up. They found that pre-menopausal node-positive women had twice the relapse rate as post-menopausal node-positive women. They