medical hypotheses

Medical Hypothesis, 1996, Volume 47, Issue 5, pages 389-397 The efficacy of surgical treatment of breast cancer By: D.J. Benjamin

Abstract

The purpose of the analysis was to resolve the two opposing claims regarding the efficacy of surgical treatment of breast cancer, namely the course of the disease is not affected by surgery because breast cancer is an incurable systemic disease, as shown by a previous analysis, results of randomized breast cancer treatment trials and long-term follow-up of breast cancer patients; and breast cancer can be cured if detected early, as shown by reduced breast cancer mortality observed in results from randomized breast cancer-screening trials using mammograms.

Seven randomized breast cancer-screening trials commonly cited as having produced evidence for reduced breast cancer mortality were analysed to identify any flaws in the trial design that would lead to confounding factors that could have affected the results. Flaws were identified in all trials in that the treatment protocols, by requiring that the type and degree of treatment depended on the stage of the tumour at diagnosis, required that up five factors were varied in each trial, confounding the results.

Correlations were sought between some of these factors and the breast cancer mortality reduction observed in some screened groups to determine which factors had the main influence on the observed results. No correlation was found between reduced breast cancer mortality and earlier surgical intervention. In fact, the trial with the most earlier surgical intervention had the smallest reduction in mortality; and that with the least earlier surgical intervention had the largest reduction in mortality. This demonstrates that the earlier-diagnosis hypothesis is invalid. Some correlation was established between reduced mortality and reduced use of radiotherapy, suggesting that radiotherapy had a greater influence on mortality than surgery. Analysis of deaths from other causes suggests that there are at least two effects involved: immune suppression caused by radiotherapy, and increased classification of breast cancer deaths as deaths from other causes following ischaemic heart damage caused by radiotherapy.

Claims that mammographic screening reduces breast cancer mortality are therefore unproven. The conclusion from the previous analysis, that surgery has not been shown to reduce mortality for any form of cancer, is therefore still valid. Surgery for breast cancer should therefore be considered as a palliative measure and radiotherapy should be avoided as a routine technique.