Adding Testosterone To Estrogen May Reduce Breast Cancer Risk In Women!


OBJECTIVE: There is now convincing evidence that usual hormone therapy for ovarian failure increases the risk for breast cancer. We have previously shown that ovarian androgens normally protect mammary epithelial cells from excessive estrogenic stimulation, and therefore we hypothesized that the addition of testosterone to usual hormone therapy might protect women from breast cancer.

DESIGN: This was a retrospective, observational study that followed 508 postmenopausal women receiving testosterone in addition to usual hormone therapy in South Australia. Breast cancer status was ascertained by mammography at the initiation of testosterone treatment and biannually thereafter. The average age at the start of follow-up was 56.4 years, and the mean duration of follow-up was 5.8 years. Breast cancer incidence in this group was compared with that of untreated women and women using usual hormone therapy reported in the medical literature and to age-specific local population rates.

RESULTS: There were seven cases of invasive breast cancer in this population of testosterone users, for an incidence of 238 per 100,000 woman-years. The rate for estrogen/progestin and testosterone users was 293 per 100,000 woman-years—substantially less than women receiving estrogen/pro-gestin in the Women's Health Initiative study (380 per 100,000 woman-years) or in the "Million Women" Study (521 per 100,000 woman-years). The breast cancer rate in our testosterone users was closest to that reported for hormone therapy never-users in the latter study (283 per 100,000 woman-years), and their age-standardized rate was the same as for the general population in South Australia.

CONCLUSIONS: These observations suggest that the addition of testosterone to conventional hormone therapy for postmenopausal women does not increase and may indeed reduce the hormone therapy-associated breast cancer risk—thereby returning the incidence to the normal rates observed in the general, untreated population.