

3rd World Congress on

Women's Health & Breast Cancer

October 03-05, 2016 London, UK

Can we avoid axillary dissection in the macrometastatic sentinel node in breast cancer

Sigita Liutkauskienė

Lithuanian University of Health Sciences Oncology Institute, Lithuania

Axillary lymph node dissection (ALND) has traditionally been a routine component of the management of early breast cancer. The benefits of ALND include its impact on disease control (ie, axillary recurrence and survival), its prognostic value, and its role in treatment selection. However, the anatomic disruption caused by ALND may result in lymphedema, nerve injury, and shoulder dysfunction, which compromise functionality and quality of life. Early cancer detection by screening mammography have led to earlier intervention in breast cancer, reducing the incidence of nodal metastases. The logical next question in the evolution of axillary staging is to ask whether there are SLN-positive patients who can avoid ALND. It is clear that there are 30% to 50% of SLN-positive patients have disease limited to the SLN. The most definitive data are from ACOSOG Z0011 prospective noninferiority randomized trial in which 813 SLN-positive patients with clinical stage T1–2N0 breast cancer were randomized to ALND compared with no further surgery. Additional positive nodes were found in 27% of the patients who had ALND, but at 6 years' follow-up there were no differences between the ALND and no-ALND arms in local (3.6% vs. 1.9%), regional (0.5% vs. 0.9%), or overall locoregional recurrence (4.1% vs. 2.8%), nor were there any differences in DFS or OS. Despite these results, this trial has been criticized for a number of reasons including premature study termination, protocol noncompliance, loss to follow-up, lack of analysis, impact of other factors on outcomes could not be controlled.

sigitaliu@yahoo.com

Effect of crocin and doxorubicin/radiation on a breast cancer cell line MCF-7

Vahid Changizi¹, Ali Reza Fanaie¹ and Majid Safa²¹Tehran University of Medical Sciences, Iran²Iran University of Medical Sciences, Iran

Introduction: Crocin is the main carotenoid of saffron showing anticancer properties. Doxorubicin as a chemotherapy drug and X-ray or gamma radiation therapy are used extensively in the treatment of breast cancer. However, their side effects limited their use. The aim of this study was to investigate the apoptosis of MCF-7 breast cancer cells in monolayer culture (in vitro), using crocin, doxorubicin, radiation, crocin-radiation and crocin-doxorubicin.

Materials & Methods: To explore the effect of crocin, doxorubicin and radiation, MCF-7 cell line was cultured and treated with different concentrations of crocin and doxorubicin. MTT assay was used to evaluate the toxicity, PI flowcytometry was used to evaluate the apoptosis and Western blotting was applied to investigate the protein expression of p53, PARP and caspase-7.

Results: According to the MTT assay, crocin can decrease growth of MCF-7 cell in a dose and time dependent manner. The results of flowcytometry also showed that apoptosis rate was significantly higher in the combined test than separate tests. Western blot analysis also revealed that the proteins expression in combined groups was much than separated groups.

Conclusion: This study revealed the expression of apoptotic proteins in the combined therapy of saffron and radiation or saffron and drug was significantly higher than that in using radiation or drug alone.

changizi@sina.tums.ac.ir