Luteal versus folicular phase surgical oophorectomy plus tamoxifen in premenopausal women with metastatic hormone receptor-positive breast cancer

Syed Mozammel Hossain, Richard R Love, Md Margub Hussain, Mohammad Golam Mostafa and Adriano V Laudico
Khulna Medical College and Hospital, Bangladesh

In premenopausal women with metastatic hormone receptor-positive breast cancer, hormonal therapy is the first-line therapy. Gonadotropin-releasing hormone analogue+tamoxifen therapies have been found to be more effective. The pattern of recurrence risk over time after primary surgery suggests that peri-operative factors impact recurrence. Secondary analyses of an adjuvant trial suggested that the luteal phase timing of surgical oophorectomy in the menstrual cycle simultaneous with primary breast surgery favourably influenced long-term outcomes. 249 premenopausal women with incurable or metastatic hormone receptor-positive breast cancer entered a trial in which they were randomised to historical mid-luteal or mid-follicular phase surgical oophorectomy followed by oral tamoxifen treatment. Kaplan Meier methods, the log-rank test and multivariable cox regression models were used to assess overall and progression-free survival (PFS) in the two randomised groups and by hormone-confirmed menstrual cycle phase. Overall survival (OS) and PFS were not demonstrated to be different in the two randomised groups. In a secondary analysis, OS appeared worse in luteal phase surgery patients with progesterone levels <2 ng/ml (anovulatory patients; adjusted hazard ratio 1.46, 95% confidence interval [CI]: 0.89-2.41, p=0.14) compared with those in luteal phase with progesterone level of 2 ng/ml or higher. Median OS was two years (95% CI: 1.7e2.3) and OS at four years was 26%. The history-based timing of surgical oophorectomy in the menstrual cycle did not influence outcomes in this trial of metastatic patients.

Biography
Syed Mozammel Hossain has completed his FCPS in Surgery from BCPS Bangladesh. He is working at Khulna Medical College and Hospital since 1998. Currently, he is the Associate Professor and Head of the Department of the Surgery unit of Khulna Medical College and Hospital. He has published more than 30 papers in well reputed national and international journals and has been serving as an Assistant Editor of BMA journal. He is doing collaborative research on breast cancer for last 10 years with International Breast Cancer Research Foundation, USA.

Notes: