Obesity and outcome of operable breast cancer in Thai patient: A single center study

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**Background:** Obesity is increasing worldwide. The impact of obesity on breast cancer outcomes reported conflicting results. We investigated the association of obesity and breast cancer survival in Thai patients.

**Method:** Medical records of operable breast cancer patients diagnosed and treated at Siriraj Hospital between January 2004 and December 2011 were reviewed. Demographic data, tumor characteristics, stage, treatment and adverse event were described. Obesity was defined as body mass index (BMI) \( \geq 25 \) kg/m\(^2\) using Asian's cutoff value. Survival in both obese and non-obese patients was analyzed.

**Results:** A total of 400 patients were included, 200 in each group. Obese patients were older and associated with more comorbidity. Obesity was associated with larger tumor size, increased number of lymph node involvement and more advanced stage. Obese patients were more likely to receive less adjuvant chemotherapy and hormonal treatment. There was no statistically significant difference in Disease free survival (DFS) and Overall survival (OS) between obese and non-obese patients. Interestingly, obesity was associated with lesser complications from chemotherapy than non-obese patients.

**Conclusions:** Obesity defined as BMI \( \geq 25 \) kg/m\(^2\) had no prognostic impact on both DFS and OS in operable breast cancer patients, although obese patients more often presented with larger tumor and higher number of lymph node involvement.