**P3 — 186 Risk of sarcopenia as the side effect of chemotherapy among breast cancer patients: preliminary study**

Cindy M. Agatha, Felix Wijovi, Helena Putri, Andree Kurniawan

1Faculty of Medicine, Pelita Harapan University, Banten, Indonesia, 2Department of Internal Medicine, Faculty of Medicine, Pelita Harapan University, Tangerang, Banten

**Background:** Breast cancer is still a problem in the global and in Indonesia. Chemotherapy as a treatment in breast cancer unfortunately can increase the risk of muscle loss. Sarcopenia was used earlier to explain muscle loss especially in aging population. Reports of sarcopenia after chemotherapy were shown in recent publications, mostly in cachexia patients. The study evaluates the relation between sarcopenia and chemotherapy was limited. Thus, aim of this study to know the relation between risk sarcopenia after chemotherapy among breast cancer patients

**Methods:** A cross-sectional study was done in our general hospital in January 2018. Breast cancer patients were consecutively recruited and screened for sarcopenia using standardized SARC-F questionnaire by asking them before and after chemotherapy. Cut-off point 4 defined to differentiate between low and high risk of sarcopenia. Relationship between the risk of sarcopenia and chemotherapy was evaluated using Chi-Square statistical method.

**Results:** There were 22 breast cancer patients with the median of age 49 (32-65) years old. Pre-chemotherapy 18 patients had SACR-F score less than 4 and were classified as low risk sarcopenia, 4 patients had score more or equal to 4 and were classified as high risk. Moreover, 5 of 18 (27.77%) patients who were low risk of sarcopenia at the start of chemotherapy changed to high risk. For 4 patients were still at high risk for sarcopenia even after chemotherapy. The relationship between the risk of sarcopenia and chemotherapy was not statistically significant p = 0.063.

**Conclusion:** Less than half breast cancer patients had an increased risk of sarcopenia after underwent chemotherapy. Further study need to be done to confirm this result.