Nutritional and systemic inflammatory response parameter and survival outcomes in the inoperable non-small cell lung cancer patients treated with palliative chemotherapy in Rajavithi hospital

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**Background:** Non-small cell lung cancer remains the major cause of cancer-related death. To date, many known prognostic factors had been determined. The other parameters known that affect the prognosis in many cancer types especially nutritional and systemic inflammatory response parameters. Some were easily accessible. The prognostic importance in NSCLC of serum albumin levels, neutrophil-lymphocyte ratio (NLR) and thrombocyte-lymphocyte ratio (TLR) was investigated in the present study.

**Method:** Nutritional status parameters (BMI and albumin) and SIR parameters (NLR and TLR) were used to determine the survival in patients with an inoperable advanced NSCLC treated with palliative chemotherapy in Rajavithi hospital.

**Results:** The median overall survival was 11.1 months. In normoalbuminemic patients, the median survival was 12.6 months. The median survival was 8.4 months in hypoalbuminemic patients. There was a statistically significant relationship between albumin status and survival (p = 0.009). Also, there was a statistically relationship between NLR and survival. The median survival was 13.4 and 6.9 months in patients with NLR < 5 or NLR >5, (p < 0.001). No significant relationship between survival and BMI or TLR.

**Conclusions:** In inoperable advanced NSCLC patients, serum albumin and NLR correlate with a survival. Serum albumin and NLR can be used as an easily accessible method to evaluate a prognosis in NSCLC patient.