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## The Relationship Between Primary Spontaneous Pneumothorax and Neutrophil/Lymphocyte Ratio

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**Objectives:** Neutrophil/lymphocyte ratio (NLR), neutrophils and lymphocyte in whole blood test lymphocyte values is an indicator of increasing day to day. NLR is generally accepted as an indicator of sub-clinical inflammation Primary spontaneous pneumothorax (PSP) is the accumulation of air at the intrapleural distance without any trauma or a lung disease, either clinically or radiologically. Causes of PSP are; 1. Bulla/blep perforation 2. Pores formed in visceral pleura 3. Pathologies like emphysema 4. Cigaret 5. Being tall 6. Pressure change 7. Familial tendency 8. Bronchial anomalies. In this study, we investigated whether neutrophil/lymphocyte (N/L) ratio is a predictive factor for pneumothorax attacks.

**Methods:** Between January 2018 and August 2018, 61 patients who were diagnosed and treated in PSP were included in the study. N/L ratios of these patients were calculated by taking the hemogram values of the patients into consideration. The relationship between pneumothorax attacks and N/L ratios was evaluated.

**Results:** Of the 61 patients, 56 were male (91.8%) and 5 were female (8.19%). This patients ages were between 17-43 (mean 29.38). 49 of these patients applied on the first attack, 10 of them applied on the second attack, 2 of them applied on the 3 attack due to the application. 5 of these patients treated only oxygen, 46 of these patients applied tube thoracostomy, 9 of these patients applied surgery (VATS, Standard thoracotomy). N/L ratio in male patients is:  $3.67 \pm 0.56$ , N/L ratio in women is:  $2.78 \pm 0.32$ . None of our patients had signs of infection. There was no significant relationship between N/L and pneumothorax attacks.

**Conclusion:** N/L ratio in PSP is not a significant predictor factor for pneumothorax attacks

**Keywords:** Pneumothorax, neutrophil/lymphocyte ratio, bulla