WORK CONFERENCE XVI
INDONESIAN SOCIETY OF RESPIROLOGY
(KONFERENSI KERJA XVI
PERHIMPUNAN DOKTER PARU INDONESIA)

theme:
INCREASING PULMONOLOGY COMPETENCE
TO STRENGTHENING
COMPETITIVENESS IN SDGs ERA

September, 11th - 16th, 2019

Alila Hotel Solo
#OP12 : Knowledge Improvement Training Programme for Community Volunteer of Tuberculosis (TB) Prevention in Lubuk Kilangan Public Health Care, Padang City

Elsesmita, Irvan Medison, Dessy Mizarti

#OP13 : The Role Of Intrapleural fibrinolytic Therapy (IPFT) In Thoracic Empyema A First Case Series In Indonesia

Andhika Kesuma Putra

#OP14 : Profile of Chronic Obstructive Pulmonary Disease Patients at dr. Soediran Mangun Sumarso Hospital Wonogiri in Mei-July 2019

Enny Sudaryati

#OP15 : Overview of the Incidence of Lung Cancer types of Adenocarcinoma in Ario Wirawan Hospital

Hasto Nugroho, Maya Anggraeny

#OP16 : The characteristic of lung cancer patients diagnosed with pneumonia undergoing chemotherapy in Moewardi Hospital

Bheti Yuliana Fitrianiingsih, Ariyanti Edi Hapsari, Yusup Subagio Sutanto, Ana Rima

#OP17 : Bacterial Profile Of Pneumonia In Lung Cancer Patients Undergoing Chemotherapy In Dr. Moewardi Hospital

Ariyanti Edi Hapsari, Bheti Yuliana Fitrianiingsih, Yusup Subagio Sutanto, Ana Rima

#OP18 : Profile of Neutrophil-to-Lymphocyte Ratio (NLR) and Platelet-to-Lymphocyte Ratio (PLR) in patients with Multi-drug Resistant Tuberculosis (MDR-TB) in Ulin General Hospital Banjarmasin

Marsheilla Riska, Mohamad Isa, Eko Suhartono

#OP19 : Prevalence of type and located of lung cancer in Wahidin Sudirohusodo Hospital February-June 2019 : a descriptive study ...

Etien Andriani, Arif Santoso, Siti Nurisyah

#OP20 : The pattern of Bacterial and Antibiotics resistance in outpatient with LRTI

Alfian Nur Rosyid, Peppy Dwi, Tutik Kusmiati, Arina Dery Puspitasari
PROFILE OF NEUTROPHIL-TO-LYMPHOCYTE RATIO (NLR) AND PLATELET-TO-LYMPHOCYTE RATIO (PLR) IN PATIENTS WITH MULTI-DRUG RESISTANT TUBERCULOSIS (MDR-TB) IN ULINGENERAL HOSPITAL BANJARMASIN

Marsheilla Riska¹, Mohamad Isa¹, Eko Suhartono²

¹Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, LambungMangkurat University/UlinGeneral Hospital, Banjarmasin
²Department of Medical Chemistry/ Biochemistry, Faculty of Medicine, LambungMangkurat University, Banjarmasin

ABSTRACT

Introduction: TB and MDR-TB are the major health problems in the world. For diagnostic support, many inflammatory markers are known to increase in TB patients. Currently, there are many studies about NLR and PLR as markers of inflammation. However, only a small amount of research has been carried out regarding the value of NLR and PLR in MDR-TB patients. The aim of this study is to evaluate the value of NLR and PLR in MDR-TB patients based on the characteristics of age and sex in Ulin General Hospital Banjarmasin.

Methods: This is an observational study with retrospective cross-sectional approach from November 2015 to May 2017. The parameters observed were leukocyte differential count and platelet count to obtain NLR and PLR.

Result: The study included 35 patients (24 men, mean age 43.79±14.42 years; 11 women, mean age 44.64±12.65 years). Based on gender, the average value of NLR in men ranged from 5.48±4.26 and the PLR value ranged from 248.71±204.23. For women, the average value of NLR ranged from 5.23±5.33 and the PLR value ranged from 243.17±115.28. NLR value was highest in the 25-34 year age group (7.01±5.58) and the lowest value in the >64 year age group (2.24±2.11). Meanwhile, PLR value was highest in the 35-44 year age group (332.19±295.43) and the lowest value in the >64 year age group (154.26±98.03).

Conclusion: In this study, it was found that NLR and PLR value was not influenced by gender. Most MDR-TB patients were in the productive age group, ranging from 35-44 years (28.6%). For NLR
values, it was found to be highest in the 25-34 year age group and for PLR values, in the 35-44 year age group. Whereas, the lowest NLR and PLR values were found in the > 64 year age group.

Keywords: Neutrophil-to-Lymphocyte Ratio, Platelet-to-Lymphocyte Ratio, inflammatory markers, Multi-drug Resistant Tuberculosis