Letter to the Editor

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Letter by Buonacera et al Regarding Article, "High Neutrophil-to-Lymphocyte Ratio Predicts Stroke-Associated Pneumonia"

To the Editor:

We read with great interest the recent article by Nam et al,[1] focused on the association between the neutrophil-to-lymphocyte ratio (NLR) and the stroke-associated pneumonia (SAP) in patients with acute ischemic stroke. NLR correlates with both pneumonia and stroke severity indexes in patients with acute ischemic stroke vulnerable to pneumonia. Although the design as 2-center retrospective study would limit the generalization of the results, the authors[1] intriguingly emphasized the potential role of NLR as a marker of higher risk for developing SAP. This further strengthens the role of admission NLR as short- and long-term outcome predictor in acute ischemic stroke, especially large vessel occlusion strokes, as demonstrated by Goyal et al[2] in an article recently published in this Journal. Therefore, according to Nam et al,[1] patients with acute ischemic stroke and a higher NLR would be older, with a higher initial National Institutes of Health Stroke Scale, dysphagic, and with a higher A2DS2 (age, atrial fibrillation, dysphagia, sex, stroke severity) score. We would be interested to see the occurrence of SAP in patients older than 75 years, as compared to younger people and whether the association between SAP and NLR is closer in this subset of patients as compared to younger people. These data would further strengthen the accordance of the results of Nam et al[1] with previous findings from our group,[3] demonstrating that NLR is a prognostic tool for community-acquired pneumonia in elderly adults, predicting 30-day mortality and 3-month rehospitalization better than traditional scores. Of note, our observational study[3] showed that age and NLR would both act synergistically to predict the presence and the severity of an inflammatory state, usually associated with community-acquired pneumonia and aging. Moreover, in keeping with these findings are our recent data[4] showing an intriguing association between NLR and carotid atherosclerotic plaques in older patients and so emphasizing the link between aging, inflammation, and carotid atherosclerosis. Moreover, it would be interesting to see whether in the study of Nam et al[1] are available data on the presence of carotid plaques, their number, and characteristics (stable, unstable), at least in patients experiencing SAP. This could allow to assess the association between NLR and carotid atherosclerosis even in patients with SAP, as already shown in our patients with community-acquired pneumonia.[3] If this link is confirmed, facing patients with SAP, namely an association of 2 major conditions of hospitalization for older people, often responsible of either higher mortality or a long-term disability, it would be emphasized the role of NLR as simple and useful tool to quickly assess the frailty state and predict the outcome. Therefore, interventional studies should be encouraged to confirm the role of NLR as an emerging tool predicting outcome as related to the response to antibiotics and anti-inflammatory drugs in patients with SAP.

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Dr Buonacera and Dr Corriere wrote the letter. Dr Malatino revised the letter for its intellectual content.

Disclosures

None.

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