1114 NEUTROPHIL TO LYMPHOCYTE RATIO: AN ADDED OUTCOME PREDICTOR IN SPONTANEOUS INTRACEREBRAL HEMORRHAGE

KT Arun. *Pushpagiri Institute of Medical Sciences and Research Center*

10.1136/emermed-2022-RCEM.25

ackground Hemorrhagic stroke accounts for 10–15% of all types of strokes. It carries higher mortality and morbidity in comparison to ischemic stroke. Evidence suggests that inflammatory mechanisms are involved in the pathophysiology of brain injury due to intracranial hemorrhage. Peripheral blood neutrophil to lymphocyte ratio (NLR) has recently emerged as a reliable marker of subclinical systemic inflammation. The aim of this study was to explore the significance of Neutrophil to Lymphocyte ratio in the functional outcome of patients with hemorrhagic stroke.

Methods Patients who presented to the Emergency Department with symptoms suggestive of stroke were evaluated with CT brain to identify hemorrhagic stroke. Patients with history of trauma, coagulopathy, fever or prior cerebrovascular accidents were excluded. The Modified ICH score and NLR were estimated at the time of admission. Functional outcome was assessed with Modified Rankin score after 3 months of initial presentation by telephonic conversation. A Modified Rankin score equal to or more than 3 was categorized as poor outcome group. Receiver operating curve (ROC) was used with NLR and Modified ICH score to analyze their influence in predicting poor functional outcome.

Results A total of 158 patients were recruited for the study. After 3 months, 107 patients were identified as the poor outcome group as per their Modified Rankin score. The mean NLR and Modified ICH score at presentation were significantly higher for the poor outcome group (6.577 and 2.83) compared to the good outcome group (2.754 and 1.49) respectively with a p value of 0.001. The cut off value of 3.2 for NLR has a sensitivity of 75% and specificity of 70% to predict poor outcome.

Conclusion In patients with hemorrhagic stroke, a higher Neutrophil to Lymphocyte ratio at presentation is associated with poor functional outcomes at 3 months.

981 DOSE THE D-DIMER TEST HAS A ROLE IN THE DIAGNOSIS OF CEREBRAL VEIN THROMBOSIS? A SYSTEMATIC REVIEW

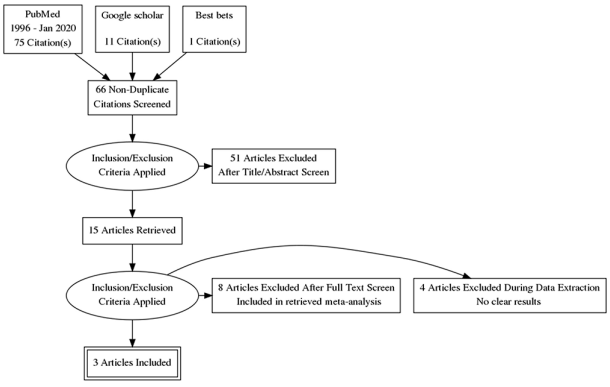
Ahmed Kassem, Thirumoothy Kumar, Mohammed Seif Mohammed. *Hamad General Hospital*

10.1136/emermed-2022-RCEM.26

Background The D-dimer test has a diagnostic role in pulmonary embolism (PE) ‘ and deep vein thrombosis(DVT). In a low-risk patient with negative D-dimer, PE or DVT can safely be ruled out.[1] [2] We aim to know whether the D-dimer has a similar role in cerebral vein thrombosis (CVT) diagnosis.

Methods/Design We attempt to identify studies that assess D-dimer’s diagnostic accuracy and reporting its sensitivity and specificity in CVT diagnosis. A literature review was performed in PubMed from 1996 to July 2021, Google scholar, and BestBETs electronic resources. The AMSTAR tool was used to assess the quality of included studies.

Results/Conclusions Out of 66 non-duplicated citations, 15 articles were relevant to our clinical question. Eight articles were included in one of the retrieved meta-analyses, and four articles were excluded during data collection because of unclear results. Two systematic reviews & meta-analy-



Abstract 981 Figure 1 PRISMA flow chart

Abstract 981 Table 1 Description of the studies included in the systemic review

Study	Study type	Patient group	Outcomes	Weakness/comments
Dentali et al, Italy, 2012[3]	A Systematic review and meta-analysis	1134 Patient with suspected or diagnosed CVT. D-dimer with CT or MRI venography was done for all patients.	D-dimer elevated in 145/155 CVT patients, sensitivity 93.8%, and normal in 692/771 of non CVT patients, specificity 89.7%	The included studies are of low quality with variable designs. Diffèrent reference tastes, variable d dimer assays and cut-off points.
Alons et al, Netherlands 2015[4]	A Systematic review and Meta-analysis	636 patient with isolated headache & normal neurological exam. D-dimer & CT or MRI venography was done for all patient	45/636 CVT cases, One had a normal D-dimer. Sensitivity: 97.8%. Specificity: 84.9% Patients with normal neurological exam & CT brain with a negative D-dimer are less likely to have CVT, < 0.2%.	The study looked for low risk patient, with isolated headache and normal neurological exam . high risk group with neurological symptomswas excluded, so the results can’t be generalized. Six potential studies were excluded because of missing data about an isolated headache.
Thammishetti V. India, 2016[5]	Prospective cohort study,	80 patients with CVTS confirmed or excluded by CT or MRI venography . D-dimer was done in all patients	65/80 conformed CVT cases. The D-dimer sensitivity and specificity was 80.62% & 80% respectively. No statistical significant value for D-dimer between CVT and non CVT group during puerperal period.	No details about patients recruitments, with the possibility of selection bias. The used D-dimer semiquantative latex test has less sensitivity than then-recent D-dimer assays.