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

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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

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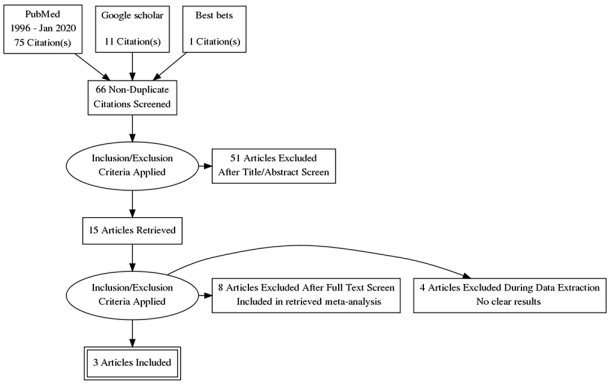
Background The D-dimer test has a diagnostic role in pulmonary embolism (PE) ‘ and deep vein thrombosis(DVT). In a low-risk patient with negative D-dimer, PE or DVT can safely be ruled out.[1] [2] We aim to know whether the D-dimer has a similar role in cerebral vein thrombosis (CVT) diagnosis.

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.

ses[3 4] and one cohort study[5] were included for the systematic review. The selection process is shown in figure (1). The studies are tabled with details of author, publication date, population details, and results as in table (1). Most studies show D–dimer has a high sensitivity, around 93 to 97%, in CVT diagnosis. However, its sensitivity is affected by age, thrombus sizes, and the method used in the D-dimer assay.

A review shows that more CVT extension & earlier presentation (<2weeks) were correlated with higher D-dime levels. Unfortunately, most of the studies are not high-quality studies, with variable designs, population, and reference standard tests. The studies showed that D dimer could help predict CVT in combination with risk factors and clinical presentation.

We concluded that the normal D-dimer only should not be used to exclude CVT. There is a probability of using D-dimer in CVT risk scoring and pre-imaging negotiation, and for that purpose, larger and higher-quality studies are needed.

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798 ACCURACY OF TELEPHONE TRIAGE FOR PREDICTING ADVERSE OUTCOMES IN SUSPECTED COVID-19: AN OBSERVATIONAL COHORT STUDY

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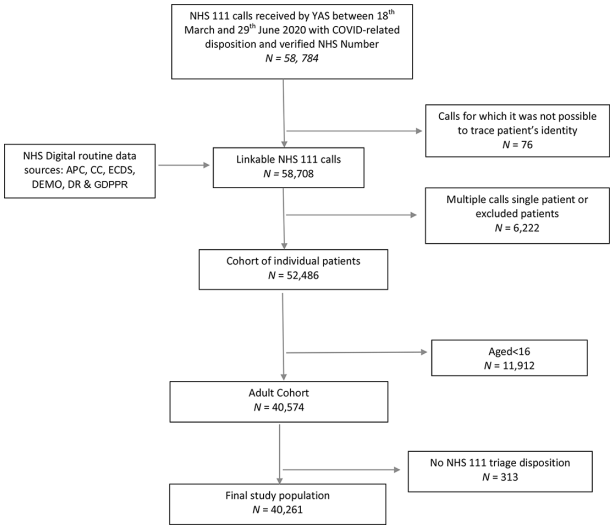
Aims/Objectives/Background To reduce the risk of spreading infection and hospitals being overwhelmed, on the 18th February 2020, NHS England advised patients with suspected COVID infection to contact NHS 111 instead of attending health care providers. In March 2020, 3 million NHS 111 calls were made; a record number and double the number of the previous year. Concerns have been raised that telephone triage may not be sufficiently accurate in identifying need for emergency care.

We aim to assess accuracy of telephone triage in identifying patients who need emergency care amongst those with suspected COVID-19 and identify factors which affect triage accuracy.

Methods/Design A cohort study of adults who contacted NHS 111 services provided by Yorkshire Ambulance Service between the 18thMarch 2020 and 29th June 2020 with symptoms indicating possible COVID-19 infection was completed. Callers were linked to ONS death registrations and routine health care data collected by NHS Digital.

The accuracy of triage outcome (self-care/non-urgent assessment versus ambulance/urgent assessment) was assessed for death or organ support 30 days from first contact. Multi-variable logistic regression was used to identify factors associated with risk of false negative or false positive triage.

Results/Conclusions 3% of the 40,261 callers experienced an adverse outcome. Self-care/non-urgent assessment was recommended for 60%, with a small but non-negligible (1.3%) risk of subsequent deterioration. Triage achieved 74.2% sensitivity (95% CI: 71.6 to 76.6%) and 61.5% specificity (61% to 62%) for the primary outcome. Multivariable analysis suggested some co-morbidities (e.g. respiratory disease) may be over-estimated, and others (e.g. diabetes) underestimated, as predictors of deterioration. Repeat contact with services appears to be an important under recognised predictor of adverse outcomes with 2 contacts (OR 1.77 95% CI: 1.14 to 2.75) and 3+ contacts (OR 4.02 95% CI: 1.68 to 9.65) associated with clinical deterioration when not provided with an ambulance/urgent clinical assessment.



Abstract 798 Figure 1 STROBE flow diagram of study population selection

Abstract 798 Table 1 Performance of binary NHS 111 triage (ambulance or urgent assessment 4 hours or less) for composite outcome (death or organ support)

Adverse outcome up to 30 days (3%, 2.8-3.2%)			
N=40, 261	Adverse Outcome	No Adverse Outcome	
Ambulance/urgent assessment	890	15, 035	Sensitivity 74.2% (71.6- 76.6%) Positive Predictive Value 5.6% (5.2 - 6%)
Self-care/non-urgent assessment	310	24, 025	Specificity 61.5% (61% - 62%) Negative Predictive Value 98.7% (98.6 - 98.9%)