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Oral presentations

237 SYSTEMATIC REVIEW OF FIBRINOGEN AND RISK OF RECURRENT STROKE AND VASCULAR EVENTS AFTER ISCHAEMIC STROKE OR TRANSIENT ISCHAEMIC ATTACK (TIA)

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Background: Inflammation is thought to play an important role in atherosclerotic stroke mechanisms. There is growing interest in the prognostic role of inflammatory biomarkers as risk factors for recurrent vascular events, after ischaemic stroke or transient ischaemic attack (TIA). Elevated fibrinogen levels are independently-associated with the risk of first-ever stroke. However, the prognostic value of fibrinogen, after ischaemic cerebrovascular events is uncertain.

Methods: We searched EMBASE and Ovid Medline, from 1970-January 2019, for any study that measured Fibrinogen after stroke or TIA, and related it to the risk of recurrent stroke or recurrent vascular events. All records were assessed by 2 independent reviewers. Any disagreements between authors regarding eligibility were resolved by consensus.

Results: We identified 2,520 publications, of which, 15 articles from 16 individual studies were eligible (11 observational cohorts, 3 cohort studies within randomized control trials, 2 case-control studies). The sample size for recurrent stroke and recurrent vascular events was 9,963 and 7,381 patients, in 11 and 10 studies, respectively. The time from event to phlebotomy was <7 days in 5, 7-90 days in 6, and >90 days in 5 studies, respectively. There was marked heterogeneity in statistical methodologies employed to examine the relationship between fibrinogen and outcomes, which did not allow valid meta-analysis (above/below specified threshold (n=4), differences in means/medians (n=5), risk per unit increase (n=1), per standard deviation (n=3), per quartile (n=1), per decile (n=1) or not specified (n=1)**).** 4 studies adjusted for all conventional vascular risk factors (age, smoking, diabetes, hypercholesterolaemia/statin use, and hypertension). 2 of 11 studies found a positive association with recurrent stroke. 5 of 10 studies found a positive association with recurrent vascular events.

Conclusion: The prognostic value of Fibrinogen after stroke or TIA remains unclear. Standardised methods and fully-adjusted multivariable analysis are needed in future prognostic studies.