PREDICTION OF MAJOR BLEEDING WITH S_2TOP-BLEED SCORE IN ACUTE ISCHAEMIC STROKE OR TIA PATIENTS: A SUB-STUDY OF THE TARDIS TRIAL

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Background
Antiplatelet therapy is widely used in secondary prevention after cerebral ischaemia, but is associated with increased bleeding. The S_2TOP-BLEED score predicts major bleeding with chronic antiplatelet therapy and is tested here in acute stroke using data from the TARDIS trial.

Methods
The international TARDIS trial assessed the safety and efficacy of intensive (combined aspirin, dipyridamole and clopidogrel) versus guideline (aspirin/dipyridamole, or clopidogrel alone) antiplatelets given for one month in 3096 patients with acute stroke or TIA. The S_2TOP-BLEED score was derived from age; sex; ethnicity; premorbid modified Rankin Scale (mRS); history of smoking, prior stroke, diabetes or hypertension; weight; and antiplatelet regime. Triple antiplatelet therapy was scored as for combined aspirin and clopidogrel. Data are number (%), median [interquartile range], or mean (standard deviation).

Results
S_2TOP-BLEED scores were available for 2893 (93.4%) patients: mean age 68.9 (10.1) years, male 1886 (63.2%), Caucasian 2834 (95.0%), smoking 770 (25.8%), prior stroke 338 (11.3%), diabetes 563 (18.9%), hypertension 1753 (58.8%), premorbid mRS ≥3 2 (0.1%), estimated weight 75.4 (16.6) kg. 1493 patients were randomised to triple antiplatelet therapy, and 1490 to guideline: 817 (54.8%) clopidogrel and 673 (45.2%) aspirin/dipyridamole. S_2TOP-BLEED scores ranged from 2 to 24, mean 11.8 (3.8), median 12 [9-14]. Major bleeding (54, 1.8% patients by day 90) increased with S_2TOP-BLEED score: 0-5, 0 (0%); 6-10, 11 (1.2%); 11-15, 30 (2.1%); >15, 13 (2.8%); p=0.0057 for trend.

Conclusions
The S_2TOP-BLEED score appears to predict major bleeding by day 90 in patients on antiplatelets after acute non-cardioembolic cerebral ischaemia.

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