

Abstract 33 Figure 2 Reasons for delay > 14 days for CABG and PCI

pathway to both surgical and percutaneous revascularisation for this patient group are needed.

34 DO CENTRES THAT USUALLY PERFORM PERCUTANEOUS CORONARY INTERVENTION TRANS-RADIALLY HAVE INFERIOR OUTCOMES WHEN OPERATING TRANS-FEMORALLY?

¹William Hulme*, ¹Matthew Sperrin, ¹Evan Kontopantelis, ²Peter Ludman, ³Mark de Belder, ⁴James Nolan, ⁴Mamas A Mamas. ¹Farr Institute; ²Queen Elizabeth Hospital; ³James Cook University Hospital; ⁴Keele Cardiovascular Research Group; *Presenting Author

10.1136/heartjnl-2016-309890.34

Background Over the last decade trans-radial access (TRA) has become more common than trans-femoral access (TFA) for Percutaneous Coronary Intervention (PCI) in the UK. Despite studies highlighting the benefits of this transition, there are concerns that the resulting drop in TFA activity has led to operators and centres losing TFA proficiency, compromising the safety and efficacy of procedures where TFA is necessary. **Aims** To evaluate the impact of each centre's recent experience of the TFA approach on procedural outcomes in TFA-only procedures.

Methods This retrospective cohort study used procedures recorded in the British Cardiovascular Intervention Society (BCIS) PCI audit from 2007 to 2013 in England and Wales. Centres were split into one of three groups depending on the

proportion of total procedures undertaken via TFA in 2013, with patient and procedural characteristics for TFA-only procedures observed within these groups over time. By considering each centre's access site choices in the 12 months prior to procedure date, simply-derived measures were used to capture the 'recent TFA experience' of the operating centre for each procedure. The association of these measures on 30-day mortality, after risk-adjustment, were then studied using multiple logistic regression.

Results A total of 235,474 procedures were available for analysis. Unadjusted TFA-only mortality in centres who were early-adopters of TRA increased more rapidly than for centres who maintained high TFA activity, and this was driven by higher baseline risk. After case-mix adjustment, recent TFA experience was found to have no effect on 30-day mortality (OR=0.99 per 0.1 increase in recent TFA proportion; CI=0.96 to 1.01; p = 0.220), with similar results when restricting to procedures with low clinical-complexity (OR=0.98 per 0.1 increase in recent femoral proportion; CI=0.95 to 1.01; p = 0.245).

Conclusions Poorer TFA outcomes for predominantly high TRA centres are driven by the propensity of these centres to utilise TFA in the highest risk patients. Once differences in case mix are adjusted for, TFA outcomes are similar between high and low radial proportion centres, with no evidence to suggest that increasing unfamiliarity with the TFA technique is detrimental. The outcome gains achieved by the national adoption of TRA is not attenuated by a loss of TFA proficiency, and centres should be encouraged to continue to adopt TRA as the default access site for PCI wherever possible.

35 THROMBUS ASPIRATION DOES NOT REDUCE MORTALITY IN STEMI PATIENTS: A META-ANALYSIS OF 20,192 PATIENTS, WITH IMPLICATIONS FOR FUTURE TRIAL DESIGN

Yousif Ahmad*, Sayan Sen, Sukhjinder Nijjer, Daniel Keene, Chris Cook, Ricardo Petraco, Matthew Shun-Shin, Graham Cole, Rasha Al-Lamee, Iqbal Malik, Christopher Baker, Ghada Mikhail, Rodney Foale, Jamil Mayet, Justin Davies, Darrel Francis. *Imperial College London*; *Presenting Author

10.1136/heartjnl-2016-309890.35

Background Thrombus aspiration is a mechanistically logical adjunct in primary angioplasty for acute myocardial infarction. Individual randomised controlled trials (RCTs) have not shown a consensus of mortality reduction and there are concerns about stroke. We perform a meta-analysis of all available RCT data on thrombus aspiration, including the large, recently published TOTAL trial.

Method and results A meta-analysis of RCTs of thrombus aspiration, including the recent TOTAL data was performed. At 30 days (11 trials; 20,192 patients) there was a marginally non-significant reduction in all cause-mortality with thrombus aspiration (OR 0.844, 95% CI 0.710–1.003, p = 0.05). The longer-term follow-up data (13 trials; 20,142 patients) was similarly non-significant (OR 0.89, 95% CI 0.78–1.01, p = 0.08). At both 30 days and longer-term follow-up, there was a statistically significant increase in stroke with thrombus aspiration (OR 1.56, 95% CI 1.05 to 2.32, p = 0.03, and OR 1.94, 95% CI 1.24 to 3.04, p = 0.04 respectively).

Conclusions The point estimates in the meta-analyses suggest that thrombus aspiration may prevent four deaths per thousand at the cost of two strokes per thousand. Although this

may initially sound favourable for the procedure, the confidence interval for mortality is still wide enough to encompass no effect, while that of stroke is not.

With mortality now so low in STEMI trials, very large numbers of patients are required to reliably identify a clinically important improvement. The task requires massive multi-centre trials or strategies that minimise per-patient costs by using established outcome-reporting infrastructure to focus on mortality, and perhaps introduce “retrospective consent”.

36 **TRIPLE THERAPY ANTICOAGULATION FOLLOWING PERCUTANEOUS CORONARY INTERVENTION (PCI) WITH NOVEL ORAL ANTICOAGULANTS (NOAC) IS SAFE AND HAS NO ADVERSE EFFECTS ON BLEEDING POST PROCEDURE WHEN COMPARED TO TRIPLE THERAPY WITH VITAMIN K ANTAGONIST (VKA)**

¹Reshma Amin*, ²Nicholas McWilliams, ²Deacon Lee, ²Fatima Altaf, ²Farzana Virani, ²Katherine Dickinson, ²David Walker, ³Andrew Sharp, ²Robert Gerber. ¹Kings NHS Trust; ²ESHT; ³Royal Devon and Exeter NHS Trust; *Presenting Author

10.1136/heartjnl-2016-309890.36

Introduction Following PCI, dual antiplatelet therapy (DAPT) is indicated for prevention of stent thrombosis.

An increasing number of patients also require long term oral anticoagulation for stroke prevention in atrial fibrillation, for mechanical heart valves and venous thromboembolism.

Bleeding rates are historically higher in patients on triple therapy anticoagulation when compared to those on DAPT.

Since the introduction of NOAC, there are a variety of combinations of triple therapy anticoagulation that patients

can be commenced on following PCI; however the bleeding risks between these groups are yet to be compared.

Methods We retrospectively studied 853 patients who underwent PCI in one centre from 2013–2014.

Of these, 103 patients required triple therapy, 49 with a Vitamin K antagonist (VKA) and 54 with NOAC.

The primary endpoint was 12 month bleeding complications as categorised by the Bleeding Academic Research Consortium (BARC). The secondary endpoint was major adverse cardiovascular and cardiac events (MACCE).

Results Of those on Triple Therapy Anticoagulation, 69% of patients were male and 32% were aged 75 or above.

The indications for anticoagulation were AF (74%), Venous Thromboembolism (12%), left ventricular thrombus (13%) and mechanical heart valve (1%)

Of those anticoagulated for AF, 95% had a CHA2ds2-VASc score greater than 2.

29% of PCI was performed for NSTEMI and 17% for ST segment elevation MI.

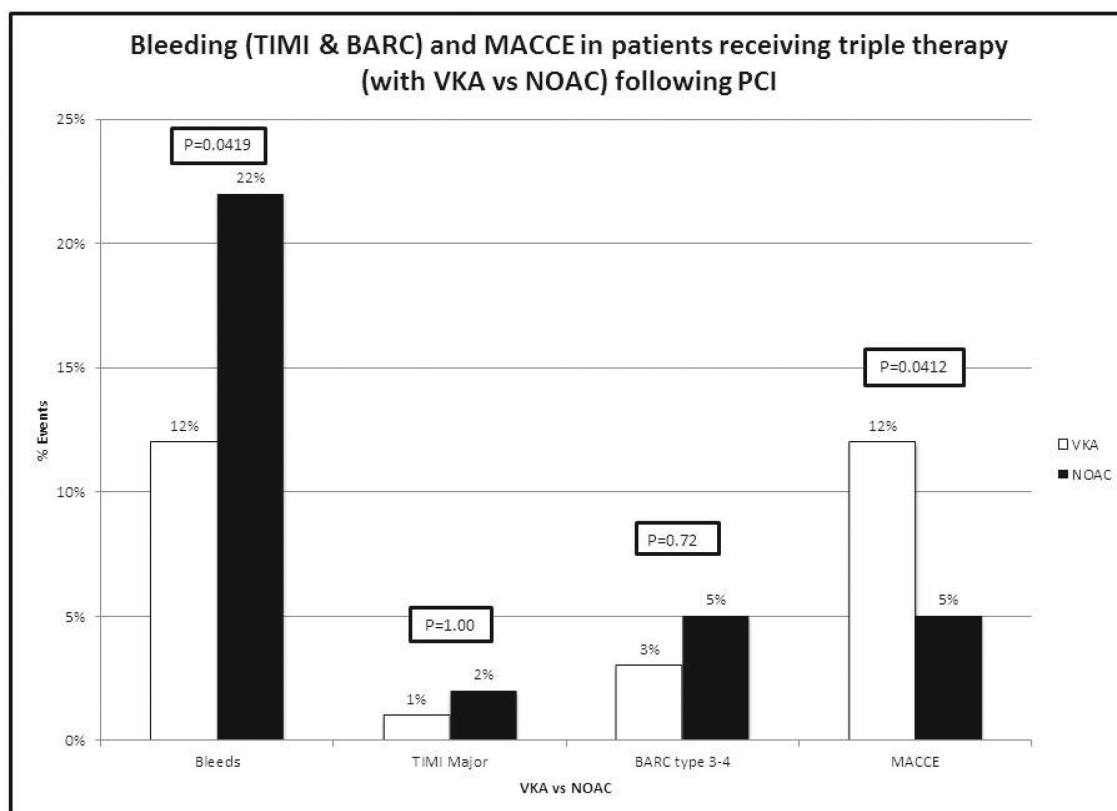
In the VKA category there was 12% minor bleeding compared to 22% in NOAC group (p0.0419).

There was no significant difference between TIMI Major and BARC bleeding between the two groups.

MACCE in the VKA group was 12% and in the NOAC group 5% of which. (p = 0.0412)

Conclusion There is no significant difference in the bleeding risk between patients taking triple therapy anticoagulation following PCI with a NOAC or a VKA.

Patients requiring triple therapy anticoagulation following PCI have significantly less risk of MACCE at 12 month follow up with NOAC compared to VKA.



Abstract 36 Figure 1 Bleeding (TIMI & BARC) and MACCE in patients receiving triple therapy (with VKA vs NOAC) following PCI