

Secondary endpoints were successful GC support, in-hospital adverse events, access-site complications, procedural duration and amount of contrast used.

Results: There were 832 procedures included with 145 cases using 5Fr GC system and 686 cases using SH GC system. No significant difference noted between the 2 groups in terms of target vessel, lesion morphology (ACC/AHA lesion classification), and mean procedure time. Procedural success was 95.2% and 96.6% respectively ($p=0.396$). One patient in each group (0.7% vs 0.1%) experienced RAO without significant clinical sequelae. Contrast load (164±68 ml vs. 140±45 ml, $p<0.001$) were greater in the SH group. (See Table 1)

Results	5 French Group (N=146)	Sheathless Group (N=686)	P-value
Procedure Success (%)	139(95.2)	663(96.6)	0.396
Failed PCI e.g. inadequate GC backup, unable to deliver stent (excluding CTO)	4(2.7)	8(1.2)	0.148
Failed PCI (CTO)	0	8(1.2)	0.190
Stent dislodgement	0	3(0.4)	0.423
GC success engagement (%)	143(97.9)	679 (98.9)	0.298
Procedure Time (min)	45(+/-21)	48(+/-20)	0.078
Contrast used (ml)	140(+/-45)	164(+/-68)	<0.001
Lesion treated per procedure (%)	1.65	1.67	0.887
Post-procedural radial artery occlusion (%)	1(0.7)	1(0.1)	0.227
MACE in-hospital (%)	1(0.7)	3(0.4)	0.695
Puncture site hematoma (%)	1(0.7)	1(0.1)	0.227

PCI: Percutaneous coronary intervention; GC: Guiding catheter; CTO: Chronic total occlusion; MACE: Major adverse cardiovascular event.

Conclusions: Both 6.5 Fr SH GCs and 5 Fr GCs were shown to achieve high procedural TRI success with low RAO rates. The SH GC eliminated the disadvantages of the 5 Fr GC whilst maintaining the advantage of low RAO rates, and may become the GC of choice in TRI.

TCT-300

HASBLED Scale Utility after Percutaneous Coronary Interventions

Adriana De la Rosa Riestra¹, Roberto Del Castillo Medina¹, Ester Canovas Rodriguez¹, Alfonso Freitas Esteves¹, Javier Alonso Bello¹, Lorenzo Hernando Marrupe¹, Pablo Salinas¹, Javier Botas Rodriguez¹
¹HOSPITAL UNIVERSITARIO FUNDACION ALCORCON, Madrid, Spain

Background: A 20-30% of p (patients) with oral anticoagulation indication requiring percutaneous coronary intervention (PCI). In this subgroup the risk of bleeding is high (4-16% annually). HASBLED scale is used to predict the risk of bleeding in patients with atrial fibrillation. However, it has been well studied its usefulness in predicting major events in patients with indications for triple therapy after PCI.

Methods: Observational, prospective consecutive 102p (track 100% with a mean 25.8 ± 10.1 months) after PCI and at discharge TT. 2 groups were obtained according to the scale HASBLED <3 (low-intermediate risk 55p, 53.9%) or HASBLED ≥ 3 (high risk 47p, 46.1%). Survival was assessed with Kaplan-Meier curves and log-rank test, multivariate analysis using a Cox-proportional hazards model for bleeding and MACE (cardiac death, nonfatal MI, revascularization, stroke) at each group.

Results: Group HASBLED ≥ 3 showed significant differences with worse CHA2DS2-VASC score (4.2±1.3 vs 3.1±1.6, $p<0.05$) and lower baseline hemoglobin level (12.4±1.7 vs 13.2±1.5, $p<0.05$) compared with HASBLED <3. Overall bleeding rate (30.9% and 27.7%, ns) and transfusion needing (16.4% vs 6.4%, ns) was similar for both groups. MACE incidence was unfavorable for HASBLED ≥ 3 group (34.5% vs 14.9%, $p=0.02$) due to the rate of stroke (12.2% vs 2.2%, $p=0.03$) and cardiac death (10.9% vs 0.0%, $p=0.02$). Overall mortality was also significantly higher in the group HASBLED ≥ 3 (21.8% vs 6.4%, $p<0.05$). Mean time to MACE was lower for HASBLED ≥ 3 group (41.3±2.3 vs 46.2±0.8 months, log-rank test $p<0.05$). Having a CHA2DS2-VASC score > 2 was associated with increased risk major cardiovascular events with a HR=4.6 95% CI[1.2 to 80.6], $p=0.03$. Mean time to bleeding event was similar in both groups (1108±84 vs 1128±92 days, log-rank test $p=0.83$). Suffering renal insufficiency (Cr> 1.5 mg / dl) trended to an increased risk of bleeding with a HR=6.8 95% CI [0.9 to 50.0], ($p=0.05$).

Conclusions: Having a HASBLED score ≥ 3 seems to identify the subgroup of patients with higher risk of mortality and major cardiovascular events among those on

triple therapy after PCI, without providing a clear value as a predictor tool for bleeding in this subset.

TCT-301

Is there a role for Bivalirudin in Transradial Percutaneous Coronary Intervention? - The BRUT PCI Study

Sundeep Adusumalli¹, Gregory Harris¹, Arjun Chagarlamudi¹, Gary M. Nash¹, Adeel Siddiqui¹, Nikhil Paladugu¹, Ramesh B. Daggubati¹
¹East Carolina University, Greenville, NC

Background: In this study we sought to compare the clinical outcomes in patients undergoing percutaneous coronary interventions (PCI) in respect to reducing bleeding strategies. Recent studies have shown transradial PCI is superior to transfemoral PCI. Data suggests that the use of bivalirudin is superior to heparin when analyzing overall outcomes in coronary PCI via transfemoral approach. There is a paucity of data when comparing different strategies to reduce bleeding.

Methods: 1722 patients at a high volume university medical center undergoing coronary PCI were retrospectively divided into four groups (femoral artery access with heparin, femoral with bivalirudin, radial with heparin/LMWH, and radial with bivalirudin). Cardiology fellows obtained access in greater than 90% of all patients.

Results: Incremental benefit is noted in all outcomes between the four groups.

	Femoral with Heparin (n=2072)	Femoral with Bivalirudin (n=213)	Radial with Heparin (n=437)	Radial with Bivalirudin (n=19)
Total Patients = 2722	2072	213	437	19
Myocardial Infarction	34	1.97	3	0.79
Cardiogenic Shock	28	1.39	5	0.29
CHF	36	2.25	3	0.17
CVA	6	0.35	0	0.00
Hemorrhagic Stroke	2	0.12	0	0.00
Transcatheter Aortic Valve Replacement	0	0.00	0	0.00
New Requirement for Dialysis	3	0.17	0	0.00
Other Vascular Comp	1	0.06	3	0.17
Bleed Transfusion	44	2.56	3	0.66
Bleeding Event at 72 hours	28	1.83	4	0.23
Bleeding At Access Site	13	0.75	3	0.17
Renovascular Access Site	14	0.83	1	0.17

* $p<0.046$. There is a relationship between access and bleeding in those who received heparin/heparin.

** $p<0.053$. There is a relationship between access and bleeding in those who received bivalirudin/heparin.

Conclusions: In this single center study, incremental benefit is noted in bleeding reducing strategies. Bivalirudin may be beneficial in Transradial PCI. Further studies to evaluate transradial coronary PCI using bivalirudin are warranted.

TCT-302

Efficacy of Transradial Approach for Coronary Angiography in Octogenarian Patients with Severe Aortic Stenosis

Ivan Gomez-Blazquez¹, José Antonio B. Alonso¹, Guillermo Bastos¹, Antonio de Miguel¹, Victor A. Jimenez¹, Alberto Ortiz¹, Andres Itiguez¹
¹Hospital Meixoeiro, Complejo Hospitalario Universitario de Vigo, Vigo, Spain

Background: Octogenarians undergoing transcatheter valve implantation or surgical valve replacement for severe aortic stenosis are increasing worldwide. They have an increased risk for periprocedural complications associated to pre-operative coronary angiography (CA). Although transradial approach (TRA) constitutes an alternative to reduce vascular complications, tortuosity of vessels and aortic root dilation in elderly patients with aortic valve stenosis might lead to TRA failure. Our aim was to evaluate the efficacy of TRA for CA in octogenarians with severe aortic stenosis.

Methods: From January 2006 to May 2013, a total of 717 octogenarian patients with severe aortic stenosis underwent CA by TRA as initial route of access at our center. Procedural failure was defined as the need to change to another vascular route to complete the CA.

Results: Mean age of patients was 83.7±3.0 years and 58.2% were females. The initial approach was right TRA in 637 (88.8%) patients and left TRA in 80 (11.2%) patients. Tortuosity of subclavian artery was present in 101 patients (14.1%), tortuosity of radial artery in 116 patients (16.2%) and severe spasm of radial artery in 35 patients (4.9%). Of total, 49 patients (6.8%) had aortic root dilation with maximum diameter >50 mm and 53 patients (7.4%) had severe aortic valve regurgitation. Vascular complication (hematoma >5 cm or radial artery perforation) occurred in 7 patients (1%). Procedural failure rate was 6.7% and the crossover to femoral artery was required in 26 cases (3.6%). Logistic regression analysis demonstrated as predictors of TRA failure: tortuosity of subclavian artery (OR 4.37 [95% CI 2.28-8.37]), severe spasm of radial artery (OR 3.05 [95% CI 1.21-7.70]) and severe aortic regurgitation (OR 3.27 [95% CI 1.10-10.58]).

Conclusions: In our series of octogenarian patients with severe aortic stenosis, TRA approach for coronary angiography was associated with low rate of procedural failure, being tortuosity of subclavian artery, severe spasm of radial artery and severe aortic regurgitation the main predictors of failure.