

April 26

TCTAP 2013

Today's Highlights

Breakfast Meetings

-Noninvasive Imaging: Coronary CT and MRI
-High-risk Patients and Plaque Evaluation
-Can't See Myocardium for Coronary Artery
-SFA Intervention: Multiple Arguments, Simple Answer!
Room 1-1, 1-2, Level 1, 7:00 AM - 8:10 AM

Nurse Continuous Education Course: "Critical Nursing Care in Patients with Heart Disease"

- Nurse Continuous Education Course
- TCTAP 2013 KCTA Symposium
Main Arena, Level 3, 8:25 AM - 3:30 PM

7th Cardiopulmonary Rehabilitation Workshop 2013

Room 1-3, Level 1, 8:20 AM - 12:20 PM

Challenging Case Competition with Experts' Focus Review I

- Endovascular Intervention
- Acute Coronary Syndrome
Room 1-2, Level 1, 8:30 AM - 12:20 PM

Challenging Case Competition with Experts' Focus Review II

- Complex PCI
- Structural Heart Disease
Structural Heart & Endovascular Theater, Level 1, 8:30 AM - 12:24 PM

Challenging Case Competition with Experts' Focus Review III

- Complex PCI
Coronary Arena, Level 1, 8:30 AM - 12:20 PM

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Late Breaking Clinical Trials

April 25, 9:30 AM – 10:25 AM, Main Arena, Level 3, Main Session VI

Trends in the Outcomes of Percutaneous Coronary Intervention with the Routine Incorporation of Fractional Flow Reserve in Real Practice

How Does FFR Use Change Our Routine Practice? Data from Asan PCI Registry



Seung-Jung Park, MD, PhD (Asan Medical Center, Seoul, Korea)

Data from the ASAN PCI registry between 2008 and 2011 was presented. Dr. Seung-Jung Park aimed to evaluate the changes in practice and outcomes of patients who underwent PCI before and after the routine use of FFR. He presented that use of FFR in this prospective registry increased from 1.9% between 2008 and 2009 to 50.7% between 2010 and 2011. Therefore, this rapid adaptation of FFR within a relatively brief duration provided a valuable oppor-

tunity to evaluate the overall benefit of FFR-guided PCI in real practice. Since January 2010, FFR measurement was mandated to evaluate the functional significance during coronary intervention. He compared PCI practice and outcomes between cohort of 2008-2009 and cohort of 2010-2011. Regarding baseline patient characteristics, after the introduction of the routine use of FFR, patients were generally older and male. More patients had hyperlipidemia, peripheral vascular disease, chronic renal failure, chronic lung disease, and chronic total occlusions. Meanwhile, more patients before the routine use of FFR had previous bypass surgery and long lesions (lesion length ≥ 20

mm). FFR was successfully measured in 1,267 patients; of those, PCI was deferred in 475 (37.5%) without any stent implantation. The number of lesions per patient (mean \pm standard deviation) was 1.8 \pm 0.9 before versus 1.8 \pm 1.0 after the introduction of routine FFR use ($p=0.39$). The total number of stents implanted per patient was 2.1 \pm 1.3 versus 1.5 \pm 1.2, respectively ($p < 0.001$). In the propensity-score matched cohort (2,178 pairs), the rates of the primary end point was significantly lower in patients after the introduction of routine FFR use versus patients before the routine use of FFR (hazard ratio, 0.57; 95% confidence interval, 0.40-0.73, $p < 0.001$) (Figure 1). He concluded that the current study confirmed the benefit of FFR-guided PCI in a real-world patient population and routine measurement of FFR in daily practice appeared to be associated with a more judicious use of stents and an improvement in clinical outcomes.

Death, MI, or Repeat Revascularization

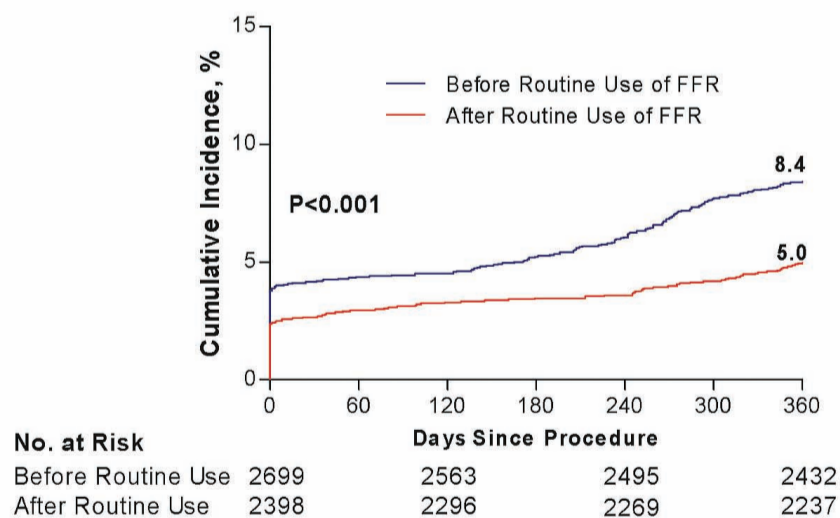


Figure 1. Major adverse clinical outcomes (death, MI, or repeat revascularization) were significantly lower in patients receiving PCI after routine use of FFR

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from page 1

Acute Coronary Syndrome in Elderly Patients

Are Elderly Patients with Acute Coronary Syndromes Undertreated? Data from Euro Heart Survey on ACS III Registry



Wojciech Wojakowski, MD (Medical University of Silesia, Poland)

Dr. Wojakowski presented data from the Euro Heart Survey ACS III Registry from 2006 to 2009. The investigators aimed to assess the use and in-hospital outcome of invasive treatment in elderly patients with acute coronary syndrome (ACS). ACS III Registry of the Euro Heart Survey Programme included 21,872 consecutive patients admitted with ACS. They included 13,018 patients (59.5%) with NSTEMI-ACS [7,688 (35.1%) with NSTEMI and 5,330 (24.4%) with unstable angina] and 8854 patients (40.5%) with STEMI/LBBB MI. Elderly patients comprised of 29.1% (n=6,371) of the ACS population with

higher proportion of females (49.4% vs. 26.8%, $p < 0.001$). He presented that the elderly with NSTEMI ACS were more often with NSTEMI (44.4% vs. 31.4%, $p < 0.01$) and less often with UA (21.6% vs. 25.5%, $p < 0.01$) than the younger population. Time from symptoms onset to admission in STEMI/LBBB MI was significantly longer than in younger patients [3:20 (1:44-7:45) vs. 2:50 (1:30-6:08) hrs: min; $p < 0.01$]. In-hospital use of antithrombotic medications was lower in elderly patients consistently across the ACS spectrum (ASA, clopidogrel, GP IIb/IIIa antagonists). The elderly were discharged less often on ASA (90.6% vs. 92.8%, $p < 0.01$) and clopidogrel (65.2% vs. 72%, $p < 0.01$) and more frequently on vitamin K antagonists (6.6% vs. 3.4%, $p < 0.01$). In all ACS patients, PCI was performed less often in the elderly

(42% vs. 56.2%, $p < 0.01$; OR 0.56, 95% CI 0.53-0.60). In STEMI, elderly patients were treated less frequently with primary PCI (42% vs. 56.2%, $p < 0.01$), as well as rescue PCI (3.3% vs. 5.5%, $p < 0.01$) and received less thrombolysis (20.5% vs. 26.5%, $p < 0.01$).

He presented that the risk of all bleeding episodes was nearly 2.5-fold higher in the elderly with ACS. In NSTEMI ACS, major bleeding occurred more frequently (3.4% vs. 1.5%, $p < 0.01$) in elderly patients. Similarly, in the elderly with STEMI/LBBB MI, the risk of major bleeding episodes was significantly increased (OR 1.5, 95% CI 1.16-1.94). In general, elderly patients with ACS had significantly increased risk of major cardiovascular events including stroke (OR 2.17, 95% CI 1.49-3.16), resuscitated cardiac arrest (OR 1.75, 95% CI

1.51-2.02), and cardiogenic shock (OR 2.63, 95% CI 2.24-3.08). In-hospital mortality was significantly higher (4.1-fold) in elderly patients presenting with ACS (10.4% vs. 2.8%, $p < 0.01$). In patients older than 75 years presenting with NSTEMI ACS, the risk of death was 5.25-times (95% CI 4.26-6.48) higher and 4.25-times (95% CI 3.61-5.0) higher in STEMI/LBBB MI patients than in respective populations of patients <75 years.

He concluded that elder ACS patients receive less interventional treatment and antithrombotic medications in NSTEMI ACS, as well as reperfusion therapy (thrombolysis or primary PCI) in STEMI/LBBB MI. In comparison to younger patients, the elderly have increased risk of in-hospital MACE and excess mortality.

Transfemoral Aortic Valve Implantation in Patients

A Propensity-Matched Comparison



Yusuke Watanabe, MD (Institut Cardiovasculaire Paris Sud, France)

Transcatheter aortic valve implantation (TAVI) has emerged as a viable therapeutic option for patients with severe symptomatic aortic stenosis who are ineligible or considered too high-risk for conventional surgical aortic valve replacement. Although this technique has reached relative maturity, further optimization of patient selection and device implantation is essential for achieving improved prognosis. The current available devices are the Edwards Sapien transcatheter heart valve (Edwards Lifesciences Inc, Irvine,

California), a balloon expandable valve, and the CoreValve Revalving System (Medtronic Inc., Minneapolis, Minnesota), a self-expandable valve.

From 2007 to 2011, TAVI was performed using Edwards valves available in diameters of 23 and 26 mm for patients with an annulus diameter ranging from 18 to 25 mm, or CoreValve prostheses available in diameters of 26 and 29 mm for annulus diameters between 20 and 27 mm. Consequently, patients with an annulus diameter of intermediate size, namely 20 to 25 mm, are amenable to treatment with either valve. To date, no direct comparison of clinical outcomes after implantation of either of the valves has been reported in a homogenous patient population.

The purpose of this study was to compare the procedural and short to mid-term outcomes following TAVI using either the Edwards valve or the CoreValve in patients with an annulus of intermediate size by using propensity-matched analysis.

From October 2008 to April 2012, 662 consecutive patients undergoing TAVI were studied in two French centers (Institut Cardiovasculaire Paris Sud, Massy, France and Henri Mondor University Hospital, Creteil, France). After propensity score matching, a total of 192 patients with intermediate-sized aortic annulus (20-25 mm) who had received either an Edwards valve (n=96, age 82.4±7.9 years, 48% male, 61.9% the 26 mm valve) or a CoreValve (n=96, 82.5±7.7

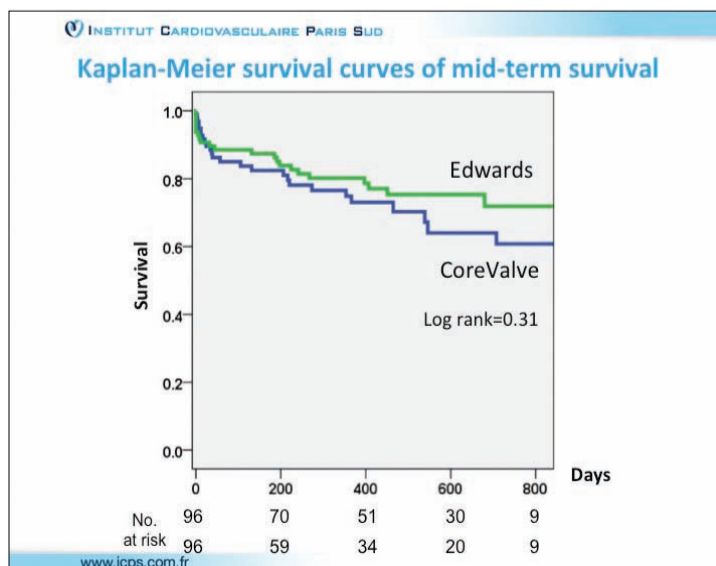
years, 50% male, 64.6% the 29 mm valve) via the transfemoral approach were studied.

Adequate reduction in post-procedural mean pressure gradients was achieved with both the Edwards valve and the CoreValve (10.9±4.7 vs. 9.1±4.4, $p < 0.01$, respectively). Major vascular complication (5.2% vs. 3.1%, $p=0.36$), device success (95.8% vs. 93.8%, $p=0.52$), and 30-day survival (90.6% vs. 89.6%, $p=0.81$) were similar. Annulus rupture was more frequent in the Edwards group (3.1% vs. 0%, $p=0.06$). The incidence of post-procedural aortic regurgitation grade ≥2/4 and new pacemaker implantation were more frequent in the CoreValve group (14.3% vs. 35.5%, $p < 0.01$ and 4.2% vs. 18.8%, $p < 0.01$, respectively). There was no significant difference in the 1-year cumulative survival rate between the Edwards valve and the CoreValve recipients (80.1±4.2% vs. 75.6±4.9%, log-rank $p=0.31$).

In this multi-center study in patients with an annulus of intermediate size, similar device success and short and mid-term outcomes were achieved with either of the valves, irrespective of specific complications related to each individual valve. A randomized study is warranted in order to confirm results.

INSTITUT CARDIOVASCULAIRE PARIS SUD			
Clinical outcomes			
	Edwards	Corevalve	P
Patient number	96	96	
Major vascular complication	5 (5.2%)	3 (3.1%)	0.36
Annulus rupture	3 (3.1%)	0 (0%)	0.12
Conversion to open heart surgery	1 (1.0%)	2 (2.1%)	0.50
Cerebrovascular accidents	0 (0.0%)	4 (4.2%)	0.06
Transfusion	21 (22.6%)	18 (18.9%)	0.54
Device success	92 (95.8%)	90 (93.8%)	0.52
Acute kidney injury	8 (8.3%)	18 (18.8%)	0.04
Post-procedural AR ≥grade 2	13 (14.3%)	33 (35.5%)	<0.01
New Pacemaker	4 (4.2%)	18 (18.8%)	<0.01
Combined Safety Endpoint (30days)	83 (86.5%)	77 (80.2%)	0.25
30 day survival	87 (90.6%)	86 (89.6%)	0.81

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References 1. J Clin Hypertens(Greenwich) 2009;11:1-7 2. Blood Press Monit 2010;15:205-212 3. The ONTARGET Investigators. *N Eng J Med* 2008;358(15):1547-1559
 4. Prescribing information of ARBs provided by KFDA(<http://ezdrug.kfda.go.kr>)

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Welcome All Early Birds to the Breakfast Meeting!

April 24, 7:00 AM - 7:30 AM, Room 1-1, Level 1

Left Ventricular Assist Devices

For: IABP, A Life-Saving Device for Shock Patients

We had quite an interesting debate at the breakfast meeting about the efficacy of IABP the day before yesterday. The presenter, Dr. Stephen G. Ellis (The Cleveland Clinic Foundation, USA), showed the usefulness of IABP on STEMI patient and Dr. Ron Waksman (Washington Hospital Center, USA) presented on the other side.

Dr. Stephen G. Ellis showed the results of long-term data from the Balloon-Pump Assisted Coronary Intervention Study (BCIS)-1 and Shock trial. The two studies suggested that the use of an intra-aortic balloon pump (IABP) in patients with low ejection fraction undergoing high-risk angioplasty procedures is associated with a lower long-term risk of mortality. And he insisted that this benefit resulted from reducing infarct size, hemodynamic improvement, and safely accessing the device because of the relatively small diameter. The mortality, however, was shown similar between IABP and control group in IABP SHOCK II trial. Therefore, he concluded: "although IABP

show no mortality benefit, IABP allows hemodynamic stabilization to facilitate revascularization. Rapid revascularization is primary goal so IABP has important role in STEMI. Moreover, we cannot exclude the underestimation of IABP because it generally initiated too late to impact infarct size in IABP SHOCK II trial."

Against: Dispelling Myths, No Benefits in Reality

Dr. Ron Waksman refuted the effects of IABP in two aspects. He said, "main reason for the use of left ventricular assist devices for STEMI intervention is to reduce infarct size and save life."

He quoted the results of Counterpulsation Reduce Infarct Size Pre-PCI for AMI (CRISP-AMI) to show that there was no reduction in infarct size between IABP and standard of care PCI for anterior STEMI without shock. CRISP-AMI trial reported that among patients with anterior STEMI without shock use of IABP prior to PCI compared with standard of care PCI did not reduce infarct size and all cause mortality at 6 months was not differ-

ent. He suggested that these finding did not support the routine use of IABP prior to PCI in anterior STEMI patients without shock.

In the aspect of mortality, he presented the IABP SHOCK II trial. This trial randomized 600 AMI patients with cardiogenic shock to IABP or no IABP; all were scheduled for early PCI and optimal medical therapy. IABP SHOCK II trial reported that IABP is safe without inherent complications, but did not reduce 30-day mortality and there was a lack of benefit in secondary endpoints. During the presentation, Dr. Ron Waksman said that class I recommendation was too optimistic, because no evidence from randomized trials showed that IABP can improve outcomes.

There was an interesting question after the presentation: which one is first: IABP for hemodynamic stabilization or PCI for revascularization? Some panels agreed firstly IABP, but others would perform PCI

before IABP because PCI itself could help hemodynamic stabilization. Surprisingly, however, all panels unanimously agreed that they would insert IABP for AMI with cardiogenic shock regardless of recent trials. They also had consensus that recent trials could not change the physician's decision about use of IABP and further aggressive device was needed not only to support cardiogenic shock but also to control systemic shock.

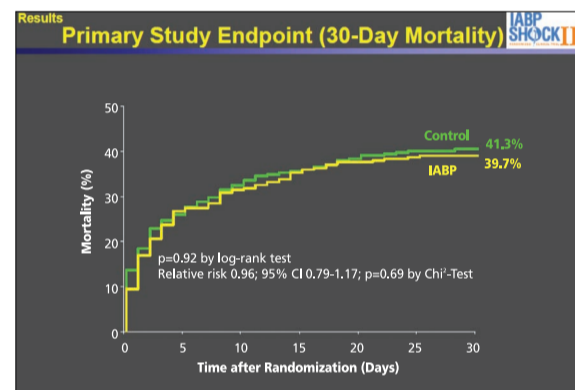


Figure 1. At 30 days, 39.7% of the IABP patients and 41.3% of controls had died (p=0.69), with no significant differences in process-of-care measures, length of stay, dose and duration of catecholamines, or renal function

April 25, 7:00 AM – 8:10 AM, Room 1-1, Level 1

Antithrombotic Therapies

For: Tailored Therapy, Frustrated but Not Gone

Another exciting discussion gathered the early birds in room 1-1 yesterday. Dr. Matthew Price (Scripps Clinic, USA) and Dr. Dominick J. Angiolillo (University of

Florida College of Medicine, USA), who were investigators of Gauging Responsiveness with A VerifyNow Assay-Impact on Thrombosis and Safety (GRAVITAS), discussed the use of platelet function test (PFT).

Dr. Matthew Price focused on the prognostic value of PFT because assessment of diagnostic and prognostic utility was not same. He cited the results of Assessment of Dual Antiplatelet Therapy with Drug Eluting Stent (ADAPT-DES) to assert that PFT is valuable as a prognostic test. In ADAPT-DES trial, platelet-reactivity units (PRU) >208

and ≥230 were independently associated with definite or probable stent thrombosis and he emphasized the ceiling effect of antiplatelet agents. He commented on the negative results of PFT in GRAVITAS and ARTIC trial. The two trials included mostly elective patients, so few events observed after discharge and predominant post discharge intervention was high dose clopidogrel that lowered post discharge effect. He also insisted that ARCTIC was hard to interpret since primary endpoint driven by unique biochemical endpoint, which was not incorporated into power calculation and antiplatelet therapy, was decided by clinician and not protocolized. He suggested the flowchart to use PFT appropriately in ACS and stable angina setting.

Against: Not Necessary, Time to Forget

Dr. Dominick J. Angiolillo tried to make

early birds forget the role of PFT. He argued about the little role of PFT from four perspectives. First, many facets of platelet biology can be assessed, therefore clinician could be confused about the choice of methods, cut-off value, timing of test, and variability over time. Second, there were more than 1,000 patients in no stent thrombosis group with high PRU in ADAPT-DES. We did not determine to what extent an antiplatelet drug was working or not. He also commented about 'sweet spot', which represented balancing safety and efficacy. The 'sweet spot', however, could not reflect the phenotypes including diabetes, acute coronary syndrome, chronic kidney disease, and genotype. PFT did not work patient-specific. Finally, he talked about potential for clinical guidance. Recent RCTs (GRAVITAS, TRIGGER-PCI, ARCTIC) and guidelines did not recommend the routine clinical use of PFT to screen clopidogrel-treated patients undergoing PCI.

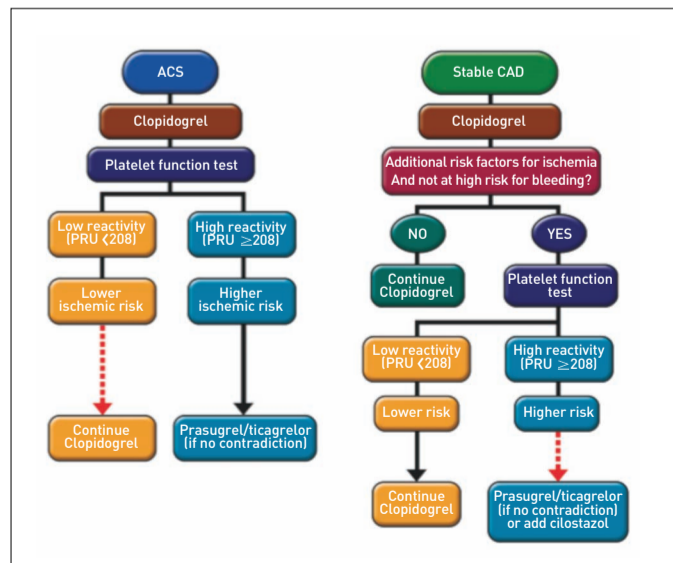


Figure 2. Price MJ, JACC 2013 in press

Yesterday's Hot lives

LM Bifurcation Lesion with Severe Calcifications Treated by Crushing Technique

Yesterday, Dr. Antonio Colombo and Dr. Chi Kin Chan treated LM bifurcation lesion. A 56-year-old gentleman was admitted with an effort-related chest pain for 10 days. He had a past medical history of hypertension and ESRD on HD due to membranous glomerulonephritis. The physical examination was normal. The ECG and cardiac enzymes were unremarkable. The echocardiography showed normal LV systolic function (EF=61%) without RWMA. The left coronary angiogram showed tight stenosis at distal LM bifurcation lesion with



Figure 1. Pre-PCI

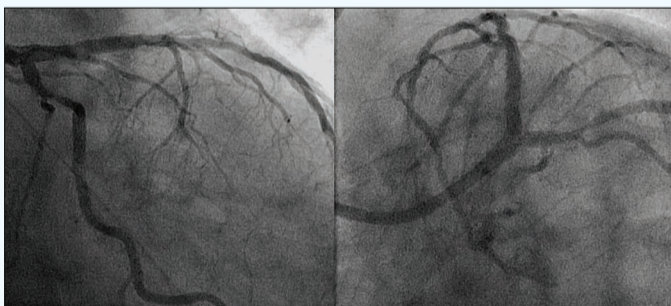


Figure 2. Post-PCI

severe calcifications (Figure 1). The right coronary angiogram was normal. An 8 Fr EBU 3.5 guiding catheter was engaged at the left coronary artery ostium through the right femoral artery. They inserted a 0.014 inch BMW wire into LAD and a 0.014 inch Sion wire into LCX, respectively. Firstly, they performed intravascular ultrasound (IVUS) to evaluate the LM bifurcation lesion. They

planned to treat the LM bifurcation lesion using a crushing technique, since LCX ostium showed a heavy plaque burden on IVUS examination. Predilatations using a Quantum 2.0x15 mm balloon were performed at LM to LCX and LM to LAD, sequentially. They deployed a Xience Prime 3.0x12 mm stent at LM to LCX. Then, they performed crushing of LCX stent with a Xience Prime 3.5x12 mm stent at LM to LAD. Additional balloon dilatations were performed with Maverick 2.0x15 mm and Quantum 3.0x15 mm balloons at LM to LCX and with a Fortis 3.5x15 mm balloon at LM to LAD. Kissing balloon dilation was performed with a Fortis 3.5x15 mm balloon at LM to LAD and with a Quantum 3.0 x 15 mm balloon at LM to LCX. After adjunctive balloon dilatation with a Quantum 3.0x15 mm at LM to LCX, final kissing balloon dilation was performed

with a Fortis 3.5x15 mm balloon at LM to LAD and with a Quantum 3.0x 15 mm balloon at LM to LCX. And then, they checked the FFR value of LCX to evaluate intermediate lesion at proximal LCX. The FFR value of LCX was 0.96. On the final angiogram (Figure 2) and IVUS, stents were over fully expanded.

Transcatheter Aortic Valve Implantation with the Core Valve

Yesterday, Dr. Eberhard Grube and Dr. Myeong-Ki Hong demonstrated successful treatment with the CoreValve for

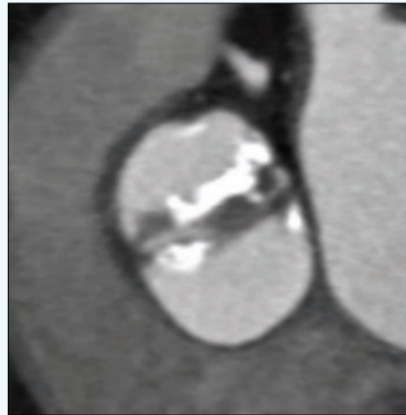


Figure 1.

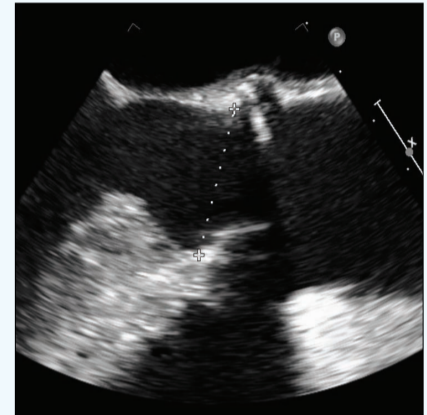


Figure 2.

severe AV stenosis. An 80 year-old female was admitted with dyspnea on exertion (NYHA class III) for three months. She has a past medical history of hypertension and COPD. Her logistic EuroSCORE was 20%. Her coronary angiogram was normal. Transthoracic echocardiography showed very severe degenerative AV stenosis and concentric LVH with normal LV systolic function (EF=61%). AV area was 0.38 cm² by continuity equation. Transaortic valve maximal velocity was 6.9 m/s. Mean and peak pressure gradient were 132 and 189 mmHg. Her AV was bicuspid (Figure 1). The annulus size was 20 mm by echocardiography (Figure 2) and 21-22 mm by CT. On CT scan, perimeter was 76 mm (Figure 3). Distance from annulus to LM and RCA ostium was 16.7 and 14.6 mm, respectively. The lowest diameter of the right iliac artery was 7.1 mm and there was no limitation to access the vessel. Therefore, they decided to approach right iliac artery.

Although the aortic annulus size measured by echocardiography and CT was about 20-22 mm, perimeter was 76 mm. Therefore, they selected a 29 mm sized CoreValve. A 6 Fr sheath and temporary pacemaker were inserted through the left femoral vein, and 7 Fr sheath and 6 Fr pigtail catheter were inserted through the left femoral artery. After right peripheral angiogram with pigtail catheter, they checked the proper puncture site of the right femoral artery. A 7 Fr sheath was inserted through the right femoral artery, and then three 8 Fr Proglide devices were placed into the right femoral artery. After removal of the

sheath, a 18 Fr Ultimium sheath was placed. And then, an AL 1 diagnostic catheter with a 0.035 inch stiff wire was used to cross the aortic valve. After crossing AV, the stiff wire was replaced by a super-stiff wire. And then, predilatation was done using a Tyshak II 23x40 mm. The 18 Fr CoreValve delivery catheter system (AccuTrak) was advanced gently into the vessel. The CoreValve crossed over AV using the super-stiff wire and deployment was done. Final fluoroscopy showed a well-functioning CoreValve with minimal aortic regurgitation (Figure 4). After the intervention, puncture site was sutured by prepared three Proglides.

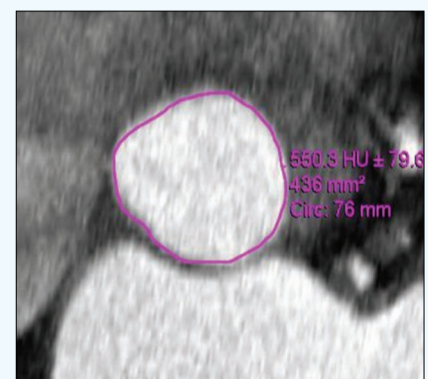


Figure 3.

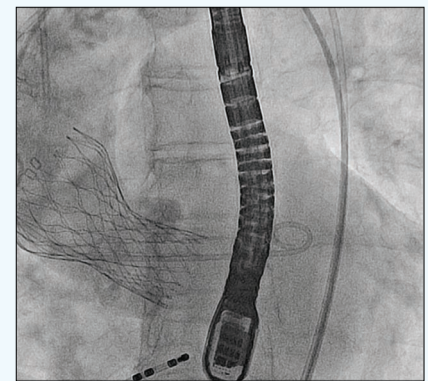


Figure 4.

April 26

TCTAP 2013

7

Best Young Scientist Award

April 25, 10:25 AM – 10:30 AM, Main Arena, Level 3, Main Session VII

“Catch Me If You Can!”: Use of a Protection Device to Prevent Cerebral Embolism in Transcatheter Aortic Valve Implantation

Nikos Werner, MD (Med. Klinik II, Germany), who presented his TAVI case last year, was presented with the Best Young Scientist Award on Thursday in recognition of his accomplishments in interventional cardiology.

Distinguished Career in Cardiology Despite Young Age

His scientific focus is the cellular basis of endothelial cell damage leading to atherosclerotic disease with a focus on bench-to-bedside translation. With TAVR development, his interest shifted towards its scientific evaluation leading to various publications including AR-index in JACC.

He is PI in a few interventional studies including TAVR studies, renal denervation, large bore closure devices, and has initiated a number of Investigator-Initiated trials. His future plans are to learn more about valvular disease and its percutaneous treatment options. His focus is to understand the underlying biology (e.g. microRNA project), peri-interventional risk reduction (evaluation of better access site and closure devices), and participating in the development of new aortic and mitral valves.

Interview

1. Please comment on your feelings about the award.

I am very honored and proud to receive

this prestigious award. My thanks go to all the patients, co-workers, and the great support of our clinical research team back home in Bonn.

2. How many TAVI cases do you usually do?

I perform approx. 8-12 TAVI cases per month.

3. Do you usually use protection device?

Currently, we use protection devices in specific patients. Especially patients who are at high risk receive TAVI under cerebral protection.

4. Which device do you prefer among TAVI devices?

Every valve has its advantages. We will choose the

valve according to its specifications that optimally fit for patient.

5. What is your favorite topic these days?

How to effectively treat mitral and tricuspid valve disease using interventional, percutaneous approaches.



Abstract & Case Competition

April 24, Abstract Zone I (AMI/ACS)

April 25, Case Zone I (Structural Heart Disease)

Interview of Abstract Competition Winner



Doo Sun Sim, MD (Chonnam National University Hospital, Korea)

Percutaneous coronary intervention in early latecomers with acute ST-elevation myocardial infarction.

There were many winning abstracts and cases. Dr. Sim is one of them. His abstract was excellent.

Dr. Sim and his colleague evaluated the efficacy of PCI in early latecomers

(presenting 12-72 hrs after symptom onset) with acute STEMI, compared to conservative medical treatment. In stable patients with STEMI presenting 12 to 72 hours after symptom onset, PCI was associated with significant improvement in 12-month clinical outcome.

1. Tell us about your center.

We have a lot of data on patients with AMI and my hospital is also a principal investigators' site; the Korean acute myocardial infarction registry in which more 55 primary PCI centers participated. And we have more than 40,000 AMI patients' data in the registry, so we are more focusing on AMI management. That's the advantage of my center I think.

2. What's the topic you would like to study further?

As I said, we are not trying to improve the outcome of AMI patients. The topic that I presented today is how we manage patients who are still in controversy area in AMI treatment practice. I would like to

perform prospective randomized trials in the future.

Interview of Case Competition Winner



Wei-Hsian Yin, MD (Cheng Hsin General Hospital, Taipei)

Transapical transcatheter closure of prosthetic mitral paravalvular leakage.

1. Tell us about your center.

My center is Cheng Hsin General Hospital

which is equipped with 1,200 beds, and we are famous as leading center of cardiology in Taiwan because we have done large serious heart chest pain even in Asian countries. I am Chief of Division of Cardiology. We perform 1,500 PCI procedures, and more than 400 surgeon cases. And we started to have our TAVI programs three months ago, and have done 6 successful cases. We also started structural heart programs 1 year ago equipped with hybrid room. I can say cooperation between surgeons and cardiologists is the best in Taiwan.

2. What's the topic you would like to study further?

The future TAVI (VALVE) is the main stream. And I think we need to pay more attention on peripheral interventions.

3. Any comment to this year's meeting?

I come here every year and enjoy this meeting a lot. It is well organized. People can learn everything here without going the USA or Europe. And this meeting invites all people from all around the world.

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Clopidogrel

Aspirin

ref. 1) proven in the Phase 1 clinical data for approval



April 26

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9

From Prevention to Rehabilitation 7th Cardiopulmonary Rehabilitation Workshop

April 26, 8:30 AM - 12:00 PM, Room 1-3

In Conjunction with CardioVascular Summit TCTAP 2013, Co-organized by Korean Association of CardioVascular and Pulmonary Rehabilitation (KACVPR)

After organization of KACVPR (www.kacvpr.com), the annual workshop for specialized cardiopulmonary rehabilitation program will be held during the CardioVascular Summit TCTAP meeting. Cardiac Rehabilitation is a secondary prevention program with exercise as the cornerstone of a comprehensive intervention which includes an educational program, controlling risk factors, and getting patients to adopt a healthy lifestyle to be kept for a lifetime.

Recently, the enormous data about the clinical evidence of Cardiac Rehabilitation (CR) has been published in several journals with outstanding clinical benefits. Accordingly, every recent major evidence-based guideline from the American Heart Association (AHA) and the American College of Cardiology Foundation regarding the management and prevention of coronary heart disease provides a class I level recommendation for Cardiac Rehabilitation and Secondary Prevention (CR/SP) program for patients with recent myocardial infarction

or acute coronary syndrome, chronic stable angina, heart failure, or for patients following coronary artery bypass graft surgery (CABG) or percutaneous coronary intervention (PCI). CR/SP programs are also indicated for patients following valve surgery or cardiac transplantation. Emerging science will advance the field further.

We focus on enhance recognition to position cardiac rehabilitation as a priority or an important intervention by cardiologists and by health providers.

We want to create a network of all the individual cardiologists and persons based in Korea and Asian region. We invited an honorable speaker, Doctor Nai-Yin Chan, Head of Cardiac Rehabilitation Service at Princess Margaret Hospital in Hong Kong, Co-chairman of the 4th Asian Preventive Cardiology and Cardiac Rehabilitation Conference, and Honorary Clinical Associate Professor of the Department of Medicine & Therapeutics at The Chinese University of Hong Kong. We are looking forward to the creation of an Asian

Chapter in the near future.

We would like to share knowledge and Know-how about the settlement and quality control of cardiac rehabilitation program.

Now is the dawn for CR in Korea. We are ready to start this outstanding practice in

our daily activity, but the actual situation is unknown.

KACVPR prepared a workshop program that is of real help to clinical practice and also will help build up individual CR program in hospitals nationwide.



Continuous Education Course for Nurse and Technologist: Care for Patients with Heart Disease

April 26, 8:30 AM - 12:00 PM, Main Arena

Joint Program with CardioVascular Summit TCTAP 2013 KCTA Symposium (The 16th Annual Conference for CardioVascular Nurse and Technologist), Co-organized by Korean Nurses Association and Korean CardioVascular Technology Association

During the daily practice and research activities, the role and position of the cardiovascular nurse and technologist is getting very important. So, the CVRF (CardioVascular Research Foundation) has provided substantial efforts for the growth of the Nurse-Tech symposium. As a result, the last several years the Nurse-Tech symposium at CardioVascular Summit TCTAP has grown up and now provides lots of contributions to TCTAP meeting. The annual

TCT Nurse-Tech course provides an invaluable opportunity for catheterization laboratory nurses, technologists, hospital administrators, and other allied healthcare provider to be exposed to the most contemporary advances in the field, and to learn from each other. The Nurse-Tech course has been the perfect complement to physician education at TCT, which together have contributed to improved outcomes for patients with cardiovascular disease.



DAILY NEWSPAPER

APRIL 23~26, 2013, SEOUL, KOREA **18th**
THE CONVENTION CENTER, COEX



April 26

TCTAP 2013

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CardioVascular Research Foundation (CVRF)

For the future of human being's health, we'll get together...

Who we are

The CardioVascular Research Foundation (CVRF) is a nonprofit clinical research foundation that contributes to improving the lives of patients with cardiovascular disease by conducting clinical researches, educating physicians and patients, and organizing international conferences.

What we've done

Since its establishment in 2002, CVRF has been conducting and supporting a large number of outstanding clinical researches to help conquer cardiovascular disease. The foundation has been also sharing cutting edge knowledge and educating physicians and other professionals by holding international conferences, running educative websites and committing to various physician training programs.

What we will do

The CVRF will do its best to develop innovative technologies and educate professionals and the public related to the cardiovascular field in order to increase the survival rate and the quality of life for patients who suffer from cardiovascular disease.

www.cvrf.org

Save the Dates

19th CardioVascular Summit TCTAP 2014

April 22-25, 2014

www.summit-tctap.com

Call for Abstracts

November 11, 2013

Call for Cases

December 16, 2013

Advance Registration

April 4, 2014

3rd TAVI (Transcatheter Aortic Valve Implantation) SUMMIT 2013

August 9-10, 2013

www.taviconference.com

Advance Registration

July 26, 2013

6th IMAGING & PHYSIOLOGY SUMMIT 2013

December 6-7, 2013

www.imaging-physiology.com

Call for Cases

August 9, 2013

Advance Registration

November 22, 2013

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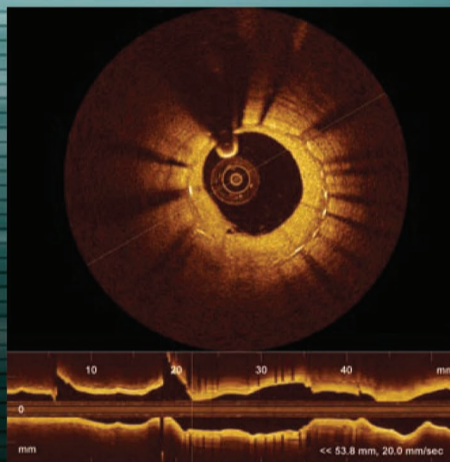
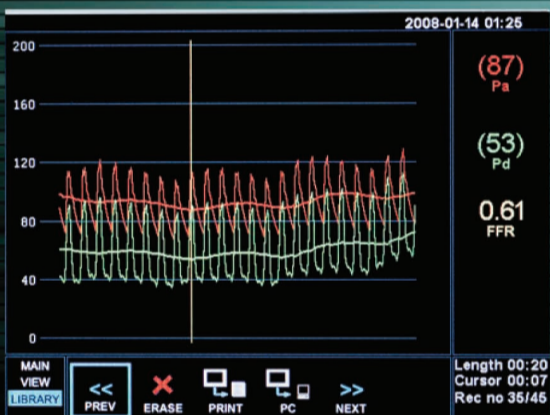
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1. Tonino P, et al. Fractional Flow Reserve versus Angiography for Guiding Percutaneous Coronary Intervention. NEJM. 2009;360:213-224.

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