ANGIOPLASTY SUMMIT
TCTAP 2012
TRANSCATHETER CARDIOVASCULAR THERAPEUTICS ASIA PACIFIC

APRIL 24~27, 2012, SEOUL, KOREA
THE CONVENTION CENTER, SHERATON GRANDE WALKERHILL
17th

Daily News

THE CONVENTION CENTER, SHERATON GRANDE WALKERHILL HOTEL, SEOUL, KOREA

Wednesday, April 25, 2012

Today's Highlights

Breakfast Meetings
- Meet the Experts over Breakfast #1-#5
  7:00 AM – 8:10 AM

TCTAP Opening and Session
Live cases & TCT Highlights
- Multivessel and Left Main Disease
- TAVI Clinical Updates
- Selected "Hot" Topics
Main Arena, 8:25 AM – 12:15 PM

TCTAP Award 2012 "Master of the Masters"
Main Arena, 12:15 PM – 12:30 PM

Live Cases and Plenary Session
Main Arena, 2:00 PM – 6:00 PM

TAVI
Featured Lectures and Live Cases
Coronary Arena, 2:00 PM – 6:00 PM

Lower Extremity Intervention
Featured Lectures and Live Cases
Endovascular Arena, 2:00 PM – 6:00 PM

Moderated Oral Abstract Competition
Abstract Zone I, Level B2, 2:00 PM – 6:00 PM
Abstract Zone II, Level B2, 2:00 PM – 6:00 PM

Moderated Complex Case Competition
Case Zone I, Level B3, 2:00 PM – 6:00 PM
Case Zone II, Level B3, 2:00 PM – 6:00 PM
Case Zone III, Level B3, 2:00 PM – 6:00 PM

Inside

Grand Opening of

'ANGIOPLASTY SUMMIT 2012-TCT Asia Pacific'

Main Arena, Vista Hall, 8:25 AM

The opening of the 17th 'ANGIOPLASTY SUMMIT 2012-TCT Asia Pacific' has been announced with hundreds of specialists and experts gathering at the Main Arena, of the Sheraton Grande Walkerhill Hotel, in Seoul, Korea on April 25th. Dating back 17 years in history, here is another chapter of this stimulating and proactive scientific program. This symposium has been dedicated to its mission to bring together medical professionals from all over the world, and to exchange new knowledge and ideas in the field of cardiovascular medicine. This interactive course will entirely cover the most relevant issues in this field and provide a great opportunity to obtain cutting-edge and the most advanced Western and European techniques, overviews, and clinical studies for the specialized physicians and other health care professionals. More than 3,500 delegates and 500 invited specialists from a wide range of disciplines will participate in this conference. The participants can review the latest basic and clinical investigations and learn how to optimally manage patients with vascular or structural heart disease and integrate the newest interventional techniques and devices related to patient care in the coronary, peripheral and carotid arteries, and structural heart disease. New for the 2012 meeting, the TCTAP Fellowship course covers all the aspects of left main and bifurcation from "accurate diagnosis to treatment" with opportunities for interactions with the world-renowned faculty. Learn from expert sessions presenting case based learning by real case presentation and focused review concentrating on FFR, non-invasive imaging, anti-platelet issues and transcatheter valve therapy. "The International Chambers: Partnership Sessions with Global Societies" is jointly organized by global interventional groups from different spectrum and provides an opportunity to communicate and collaborate. The course director of the congress, Dr. Seung-Jung Park, mentioned in his opening address that he hopes the participants maximize their learning experience from the precious lectures and live demonstrations of worldly renowned experts. This international scientific congress is working to establish a bridging role between Asia Pacific and Western regions in cardiology. Dr. Park said that they will be working even harder at publicizing throughout the Asia Pacific Rim region, and update themselves continuously to coincide with current trends of the industry.

Welcome to the 17th ANGIOPLASTY SUMMIT-TCTAP 2012!

For the last 16 years TCTAP has achieved substantial development in the quality of program contents. The number of faculty members who have made many innovative contributions to the growth of its academic and administrative activities and young, energetic researchers who actively participate in this meeting every year have this meeting unique and meaningful. Now ANGIOPLASTY SUMMIT-TCTAP has become one of the leading names representing interventional therapy, and it will continuously grow to achieve the ultimate goal of improving the quality of medical care for patients not only in Asia but overseas. Whatever you come with to this meeting, you can bring back something new, useful, and worthy in your career path.

TCTAP 2012 will feature an ambitious, comprehensive program that promises to provide an invaluable educational experience with practice-changing implications.

TCTAP Fellowship Course - Left Main & Bifurcation PCI: From Accurate Diagnosis to Treatment

From Tuesday to Friday, your days will be full with interesting, dynamic academic environment. Of the sessions TCTAP Fellowship Course is specially designed

Continued on page 2

Meeting Information

Registration Desk [Conference Bag & Badge Pick-up]

Location

B3, Registration

Opening Hours

- Tuesday 24, 10:00 AM – 7:00 PM
- Wednesday 25, 6:30 AM – 7:00 PM
- Thursday 26, 6:30 AM – 7:00 PM
- Friday 27, 6:30 AM – 3:00 PM

Preview Room for Presenters

Location

B1, W Seoul-Walkerhill

Opening Hours

- Tuesday 24, 10:00 AM – 7:00 PM
- Wednesday 25, 6:30 AM – 7:00 PM
- Thursday 26, 6:30 AM – 7:00 PM
- Friday 27, 6:30 AM – 3:00 PM

Scientific Sessions

Opening Hours

- Wednesday 25, 8:25 AM – 6:00 PM
- Thursday 26, 8:30 AM – 6:00 PM
- Friday 27, 8:30 AM – 3:00 PM

Industry Satellite Symposium

Opening Hours

Breakfast Meeting

- April 25 (Wed.)~ 27 (Fri.), 7:00 AM- 8:10 AM

Lunchtime Activities

- April 25 (Wed.) ~26 (Thu.), 12:45 PM- 1:45 PM

Evening Symposia

- April 24 (Tue.) ~ 26 (Thu.), 6:00 PM- 8:30 PM

Information Desk

Locations

- B3, Exhibition Hall III
- B2, Exhibition Hall II
- B1, Exhibition Hall I
- 1F, Entrance

Exhibition & Learning Center

Locations

- Exhibition I: B1, Grand Hall
- Exhibition II: B2, Main Arena Lobby
- Exhibition III & Valve Learning Center: B3, Public Area
- Exhibition IV: 1F, Coronary & Endovascular Arena Lobby

Opening Hours

- Wednesday 25, 8:00 AM – 6:00 PM
- Thursday 26, 8:00 AM – 6:00 PM
- Friday 27, 8:00 AM – 3:00 PM

Internet

Free WiFi is available in whole area of the venue.

Cyber station

Location

- B1, Exhibit Hall Ⅰ
- B2, Exhibit Hall Ⅱ
- 1F, Exhibit Hall Ⅳ

Lost & Found

If you have lost and found items please visit CVRF booth (B1)

Free Mobile Recharge

Available at Exhibition Hall Ⅰ (B1) and Exhibition Hall Ⅲ (B3).

from page 1

for fellow and young cardiologists who need step by step learning points of left main and bifurcation PCI. There still remains something that needs to be resolved in the treatment of left main and bifurcation. And for this reason this session specially addresses some important insights for treating diseases and technical and clinical challenges in which the experts experience on a daily basis. It is really exciting to see and listen to knowledge and technical know-how presented by the most experienced cardiologists.

Meet the Experts over Breakfast

Come out of your cozy bed, and go to the morning sessions starting from 7:00 am every morning. One of the main advantages of this session is a lively open communication on each topic between the experts and attendees. Every current issue in cardiovascular and endovascular interventional field, including FFR, CTO intervention, DES technologies, and TAVI will be discussed.

The State of the Art Lectures: Wrap-up and Brand-New Knowledge with Experts

Clinical trials and new solutions for treating patients have been introduced and presented over the past year in many countries. This session is intended to explore recent advances in cardiology and review the most influential and significant researches with experts.

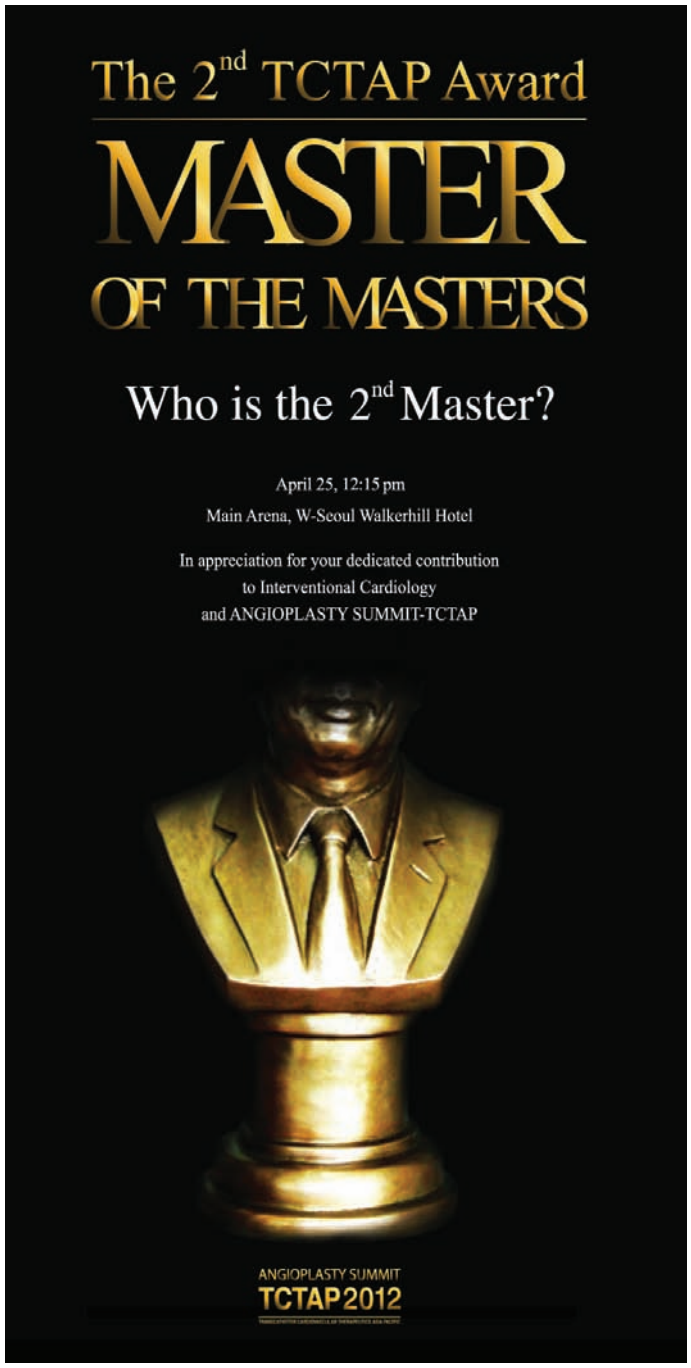
Following topics will be discussed:

- Percutaneous Coronary and Non-Coronary Intervention
- Update on Revascularization Guideline and Acute Care/Drug Therapy
- Imaging, Physiology, and Vulnerable Plaque
- Advances in Surgical and Cell Therpay for Ischemic Heart Disease

Moderated Complex Case & Abstract Competition

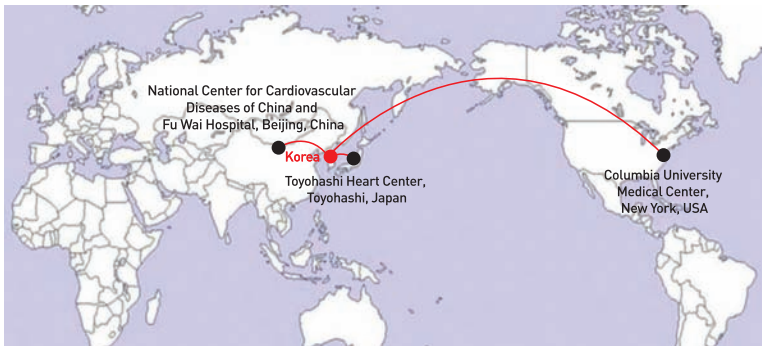
Every year these sessions are extremely popular and well attended. Many of interesting cases and abstracts are presented by passionate cardiologists, and they are always very competitive.

Continued on page 3



Live Case Transmission Sites

Live Case Demonstration is a core of the ANGIOPLASTY SUMMIT-TCTAP 2011, featuring the different strategies and techniques by world first-class operators in the same type of lesions simultaneously.



Korean Sites

Asan Medical Center, Seoul

- Main Arena, April 25 (Wed.), 2:00 pm-3:00 pm/4:00 pm-5:30 pm
  April 26 (Thur.), 8:30 am~9:30 am/11:00 am~12:00 am/2:00 pm~3:00 pm/4:00 pm~5:30 pm
- Endovascular Arena, April 25 (Wed.), 3:00 pm-4:00 pm/5:00 pm-6:00 pm
  April 26 (Thur.), 9:40 am-10:20 am/11:30 am-12:30 pm/3:30 pm-4:00 pm

International Sites

Columbia University Medical Center, New York, USA

- Main Arena, April 25(Wed.),8:40 am-9:40 am

National Center for Cardiovascular Diseases of China and Fu Wai Hospital, Beijing, China

- Main Arena, April 26(Thur.),10:30 am~11:00 am
- Coronary arena, April 26(Thur.),11:30 am~12:30 am

Toyohashi Heart Center, Toyohashi, Japan

- Main Arena, April 26 (Thur.), 3:00 pm-3:30 pm
- Coronary Arena, April 26 (Thur.), 4:00 pm-5:00 pm

Keimyung University Dongsan Medical Center, Daegu

- Main Arena, April 25 (Wed.), 3:30 pm~4:00 pm
- Coronary Arena, April 25 (Wed.), 5:00 am-6:00 pm

from page 2

The numbers of case and abstract submissions are both increased, and 227 cases and 299 abstracts are presented at TCTAP. For each session 5-7 cases and abstracts are presented, and the panels review and select the best from each session. After the meeting, the two final winners, each from case and abstract presenters will be chosen for TCTAP Best Young Scientist Award.

The Moderated Abstract/Case Competition sessions take place Wednesday and Thursday.

We wish to thank all the dedicated and hard-working CVRF staff and faculty for their enormous efforts in preparing for TCTAP. All of us are looking forward to a year's worth of planning resulting in an exciting learning experience for the thousands of TCTAP attendees, as well as our faculty coming from all different parts of the world. We have no doubt this event will ultimately result in improved care for patients with cardiovascular disease.

FFR Guided and IVUS Supported Functional Angioplasty

Let's Overcome our Visual Bias for more Optimal Stent Results

In this TATAP 2012 meeting, Seung-Jung Park, MD from Asan Medical Center, Seoul, Korea summarized the concept of Visual Functional Mismatch.

During the past several decades, revascularization for acute coronary syndrome was considered as life saving procedure. In fact, the studies demonstrated that the revascularization was associated with lower mortality in STEMI patients or lower hard endpoints (death or myocardial infarction) in ACS patients. In contrast, the efficacy of revascularization in patients with stable coronary artery disease has been debatable. Large randomized clinical trials comparing the revascularization and the optimal medical treatment such as COURAGE or BARI2D trials failed to demonstrate the benefit of stent implantation. Therefore, stent seems to be implanted only in medically refractory patients having objective evidence of ischemia. However, in the real world practice, only 40% of patients underwent stent implantation performed stress test prior to percutaneous coronary intervention (PCI). Given the finding that fractional flow reserve (FFR) was more than 0.80 in about 40% of angiographic significant stenosis, the unnecessary procedure was performed in substantial stable coronary artery disease patients. In addition, only 50% of PCI procedures in stable coronary artery patients was considered as appropriate according to the PCI appropriate use criteria. Therefore, to make a treatment decision for PCI, FFR should be applied, particularly in cases of obscure ischemic potential to avoid unnecessary stent implantation and related complication, which may be associated with the improvement of PCI outcomes.

The most important reason why we should use FFR in daily cath lab activity is the inaccuracy of coronary angiogram in determining the functional severity of coronary artery stenosis. During the past several decades, coronary angiography was used as the limited golden standard to diagnose obstructive coronary artery disease. However, coronary angiography alone may over or underestimate the severity of coronary artery stenosis. A sub-analysis from the FAME study thoroughly evaluated the "visual-functional mismatch" of coronary artery disease. Of the patients with 3 vessel disease, as assessed by visual estimation, only 14% had 3 vessel disease after fractional flow reserve (FFR) measurement, whereas 9% had no functionally significant stenoses. Of the 1,329 target lesions (›50% stenosis by visual estimation), only 816 (61%) had FFR ≤0.80. Furthermore, among lesions with stenoses of 50% to 70%, 71% to 90%, and 91% to 99%, only 65%, 20%, and 4%, respectively, were found to have FFR ›0.80. Of 509 patients with angiographically defined multi-vessel disease, only 235 (46%) had functional multi-vessel disease (≥2 coronary arteries with an FFR ≤0.80). These findings indicated that, in the absence of FFR, about 40% of unnecessary procedures would have been performed in functionally insignificant stenotic lesions. Furthermore, a considerable proportion of patients who could have been treated by PCI underwent bypass surgery.

Although such a "visual-functional mismatch" was frequently encountered in daily practice, the mechanism of this phenomenon was poorly understood. This issue has important implications for many physicians to overcome the angiography dependent decision making for revascularization leading to perform the unnecessary procedures or vice versa. Therefore, SJ Park and his colleagues prospectively analyzed the data of simultaneous performance of quantitative coronary angiography, fractional flow reserve measurements, and intravascular ultrasonography in 1000 patients (1066 non-left main lesions and 63 left main lesions). In this study, they found that among the stenoses with angiographic diameter stenosis (DS) ≥50%, 35% of left main lesions and 57% of non-left main lesions had FFR ≥0.80 (p=0.032). Conversely, among the stenoses with DS ‹50%, 40% of left main lesions and 16% of non-left main lesions had FFR ‹0.80 (p‹0.001)

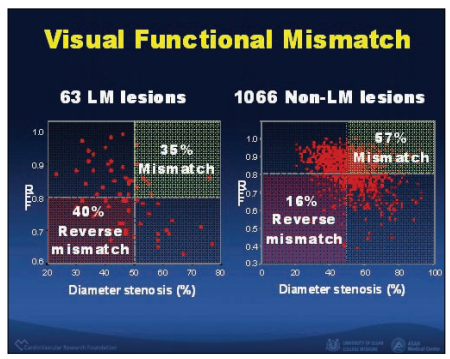


Figure 1.

(Figure 1). Independent predictors of FFR ≥0.80 in stenoses with DS ≥50% (mismatch) included older age, non-left anterior descending artery lesions, the absence of plaque rupture, shorter lesion length, larger minimal lumen area, smaller plaque burden and greater minimal lumen diameter; independent predictors of FFR ‹0.80 in stenoses with DS ‹50% (reverse mismatch) included younger age, left anterior descending artery lesions, the presence of plaque rupture, smaller minimal lumen area and larger plaque burden. In addition, they performed a simulation study to support their findings as shown in Figure

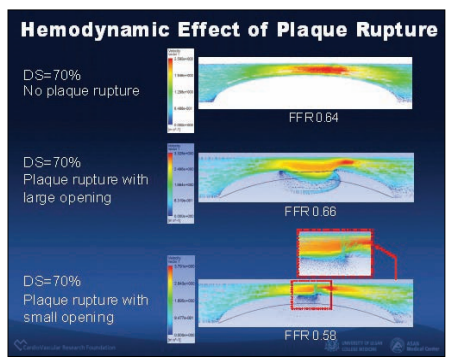


Figure 2.

2. SJ Park said that the discrepancy between coronary angiography and FFR in assessment for coronary artery stenoses was attributable to the various clinical and lesion specific factors, frequently unrecognizable in diagnostic coronary angiography, suggesting coronary angiography cannot sufficiently predict the result of FFR. Therefore, interventional cardiologists should overcome the personal visual bias that produces suboptimal outcome options and employ functional evaluation prior to PCI.

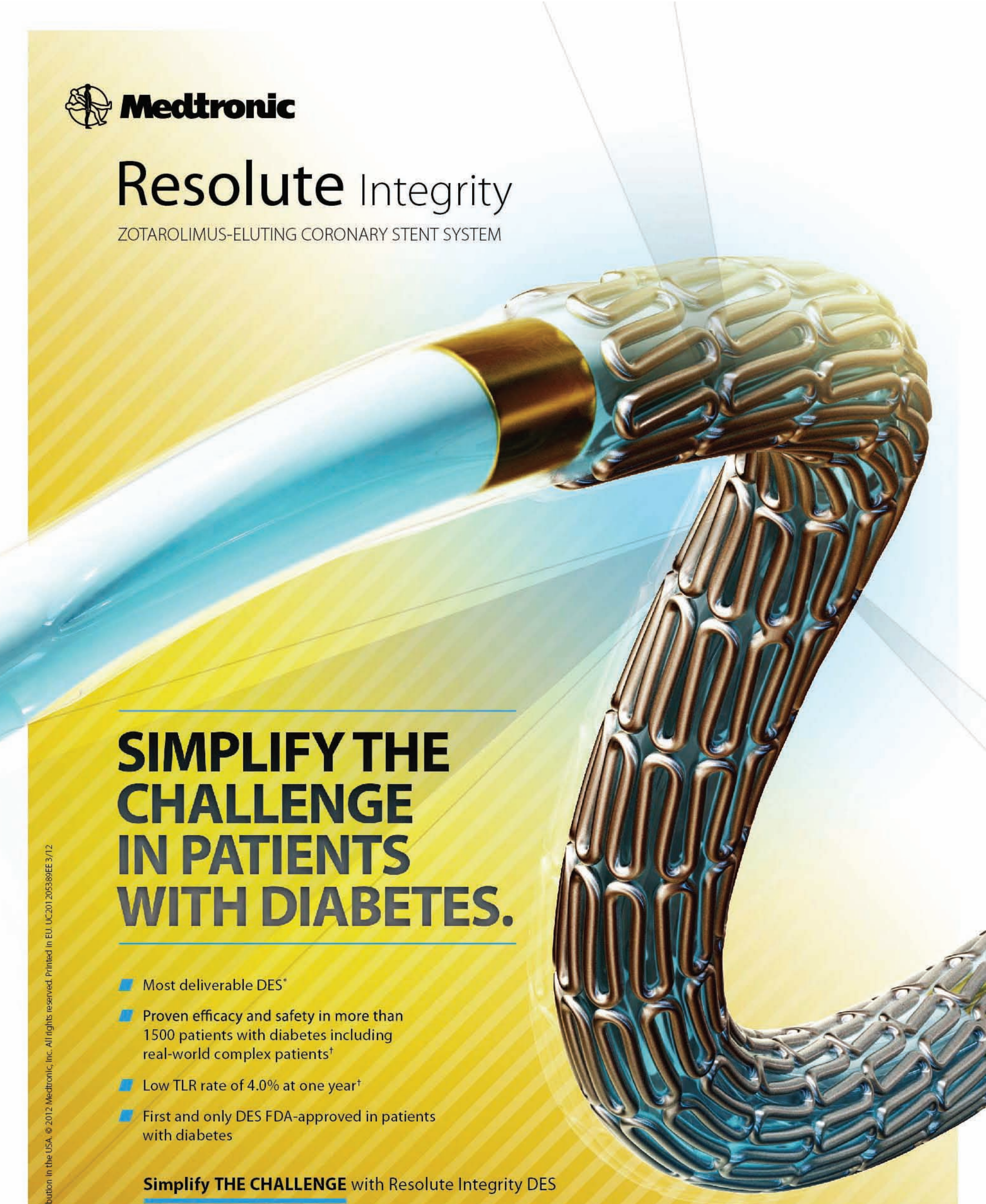
As a complementary modality, IVUS also carries an important role in contemporary PCI procedure. SJ Park and his colleague also reevaluated the IVUS MLA criteria to determine the functional significance. They addressed these issues in 201 patients with 236 coronary lesions who underwent pre-interventional IVUS and FFR measurements to determine the best IVUS MLA criteria corresponding to FFR ‹0.80. Using ROC analysis, they provided new IVUS MLA criteria, showing that the best cut-off value of IVUS MLA for predicting FFR ‹0.80 was 2.4 mm2, a figure smaller than previously reported. However, even using our new, stricter criteria of MLA, ‹2.4 mm2, 30% of analyzed lesions had MLA ‹2.4 mm2 but FFR ›0.80. Thus, they demonstrated that regardless of cutoff values, use of IVUS MLA criteria alone could not predict the result of FFR measurement and still lead to the performance of unnecessary procedures in a considerable proportion of patients. Therefore, operators should be aware of this disconnection between visual by IVUS and functional relationship. In addition, MLA alone cannot replace the role of non-invasive or invasive functional studies in making clinical decisions about whether to dilate a coronary stenosis. Instead, IVUS should be utilized to secure the PCI procedure in accurately assessing coronary anatomy, assisting in the selection of treatment strategy, and in stent optimization. In addition, recent observational studies demonstrated that IVUS guided PCI was associated with lower adverse clinical outcomes in patients with significant left main coronary artery disease, bifurcation disease, and even in "real world" population.

SJ Park concluded FFR can be used to determine the functional significance of a stenotic lesion, whereas IVUS surveillance can be used to assess the anatomy of a lesion, including its size, the position of plaque, and the adequacy of stent deployment. The simultaneous utilization of these two complementary modalities may result in the optimization of PCI results and may indicate the future direction of interventional cardiology.

Medtronic

Resolute Integrity

ZOTAROLIMUS-ELUTING CORONARY STENT SYSTEM



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* Bench test data vs. competitors on file at Medtronic, Inc.
† Silber S. Pooled post-hoc analysis of Resolute ZES in patients with DM. TCT 2011.

Innovating for life.

Identification of High-Risk Patients: From Vulnerable Plaque to Ischemia

Vulnerable Plaque: Anatomic Features Linked to Future Events

Room 3-1, Cosmos Room, Level 3, 1:00 PM - 02:15 PM

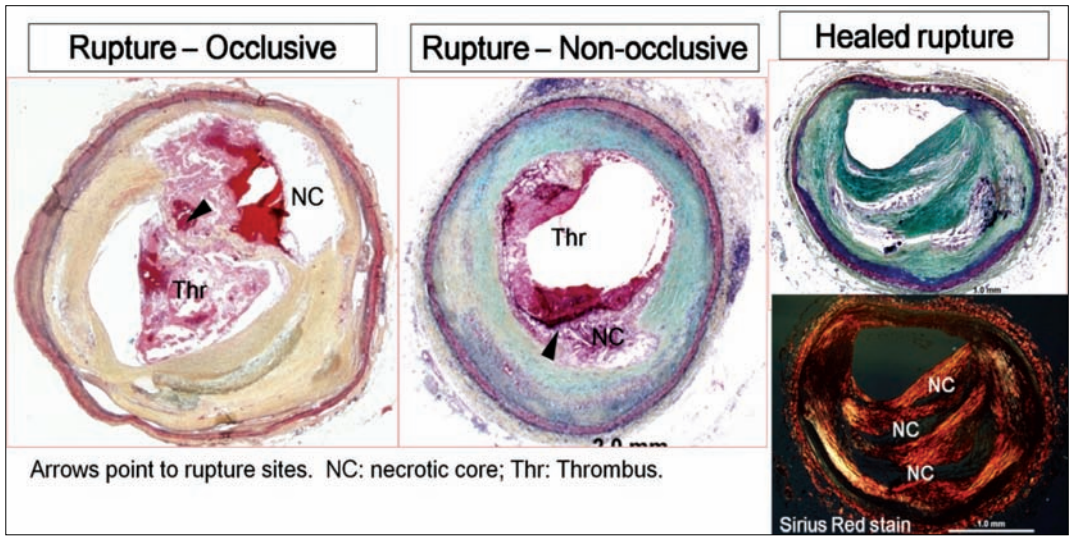
Renu Virmani, MD

Acute coronary syndromes (ACS) and sudden cardiac death are the main causes of morbidity and mortality worldwide. ACS is an acute clinical manifestation of the chronic process of atherosclerosis. In the majority of patients, ACS events are caused by plaque rupture in flow-limiting and non-flow-limiting angiographically intermediate stenoses. Histopathologic analyses have shown that plaque composition is related to the occurrence of acute clinical events and therefore, to the vulnerability of the plaque. The original concept of vulnerable plaque, an assumed precursor lesion of plaque rupture, was introduced by Muller and defined as a coronary lesion that morphologically resembles ruptured plaque but has an intact fibrous cap without thrombosis.

Vulnerable Plaque: Anatomic Features Linked to Future Events was presented at the Cosmos room (level 3), April 24th, at 1:00 PM by Dr. Renu Virmani (CVPath Institute, Gaithersburg). She showed that her laboratory has assessed the characteristics of ruptured and vulnerable plaque thin cap fibroatheroma (TCFA) where the fibrous cap thickness of ruptured plaque measured only 23±19 μm by histomorphometric analysis. The current definition of TCFA, fibrous cap thickness of ≤65μm, is based on the same study since 95% of the remnant fibrous cap of ruptured lesion measured ≤65 μm.

The morphology of TCFA shows a relatively large necrotic core with an overlying thin but intact fibrous cap infiltrated by chronic inflammatory cells consisting mainly of macrophages, suggesting that these inflammatory cells may play an integral role in triggering the destruction of the fibrous cap. There is generally a paucity or absence of smooth muscle cells but the matrix of the cap is composed of Type I collagen. Despite similarities with rupture, TCFA exhibits a trend towards smaller necrotic cores and less calcification. Cross-sectional luminal narrowing and positive remodeling of TCFA exhibits are also typically less than in ruptured plaques, indicating the importance of plaque volume as well as plaque composition to determine the vulnerability of the plaque.

On the other hand, it is also known that the rupture of a plaque does not always lead to a clinical event. Autopsy studies suggest that plaque progression beyond 40 to 50 % cross-sectional area luminal narrowing occurs secondary to "silent" ruptures. Healed ruptured lesions sites can easily be identified histologically by the presence of breaks in the fibrous cap with overlying newly laid down fibrous intimal tissue that is rich in proteoglycans. As the frequency of healed plaque ruptures increases so does the lumen narrowing. She presented that the main mechanism of progression of luminal narrowing could be through repeated silent ruptures with non-occlusive thrombus. It is occlusive thrombosis or severe narrowing from thrombosis that is the primary substrate responsible for the clinical manifestation such as acute coronary syndrome or sudden death (Figure). Her recent study of ruptured plaque revealed that the necrotic core area within the plaque is the best morphological predictor of the occlusive thrombosis among other parameters such as macrophage infiltration and fibrous cap being equally important but are difficult to detect non-invasively, raising the question of whether we need a more sophisticated definition of TCFA than the fibrous cap thickness as appropriate for the clinical identification of a high-risk plaques.



Arrows point to rupture sites. NC: necrotic core; Thr: Thrombus.

Accurate diagnosis of high-risk plaque is a priority concern for all cardiologists with the idea that if we could identify these sites prior to a rupture, then we could treat them by non-interventional or interventional means. With attempts to identify these high-risk plaques, many invasive and non-invasive methods have been introduced recently. Intravascular ultrasound (IVUS) has been conventionally used for many decades; however, it has been difficult to accurately identify plaque components or microstructures because of limitated spatial resolution. Optical coherence tomography (OCT), which has a high resolution of 15 to 20 μm, has the ability to measure fibrous cap thickness and to detect macrophage infiltration; however, it has limited depth penetration. Further technological advancements are needed to identify vulnerable plaque with higher accuracy. Or, we need a revised, more precise definition of which vulnerable plaque will rupture and therefore are truly high-risk plaque.

Plaque Profiling: Pursing VP Signatures & New Therapeutic Agents

Cheol Whan Lee, MD

Dr. Cheol Whan Lee, Professor of Medicine, Division of Cardiology at the Asan Medical Center, presented on plaque profiling: pursing VP (vulnerable plaque) signatures and new therapeutic agents, at the Cosmos room (level 3), April 24th, at 1:15 PM. Plaque rupture and subsequent thrombus formation is the initial event of acute coronary syndrome (ACS). HMGCoA reductase inhibitors (statins) and P2Y12 receptor blockers (clopidogrel, ticagrelor) are the cornerstone of therapy for ACS patients. It has been demonstrated that the statins start to prevent coronary events rapidly, long before cholesterol levels fall. HMG-CoA reductase is present in coronary atherosclerotic plaques, and is more commonly expressed in unstable plaques compared with stable plaques. These findings may help explain the early benefits of statin therapy in patients with ACS, he said. In addition, in the PLATO trial, the cardiovascular benefits of ticagrelor outweighed those of clopidogrel, suggesting additional benefits beyond platelets. He showed that the P2Y12 receptor is also present in coronary atherosclerotic plaques, and increased in culprit plaques of patients with ACS. These results suggest that the P2Y12 receptor may play a direct role in plaque destabilization, supporting pleiotropic effects coupled with the P2Y12 receptor. Despite evidence-based treatment, a substantial number of patients experience recurrent coronary events after ACS, requiring new therapeutic agents. Currently, the research on plaque rupture is hampered by lack of a suitable animal model. Using coronary atherectomy tissues, he presented potential new targets relating to plaque rupture, including ADAMTS proteases and inflammatory markers. Finally, he said that plaque profiling may provide novel insights into the mechanism of plaque instability, and a new approach for potential drug target discovery.

PREDICTABLE RESPONSE[2] & SUPERIOR PROTECTION

AGAINST THROMBOTIC CV EVENTS VS. Clopidogrel[3]

Effient™ tablet 5mg/10mg (Prasugrel HCL)

Effient™ (prasugrel) tablets

Reference 1. Fuster V. et al. Circulation. 2008;118:1607-1608. **2.** Farid NA. et al. J Clin Pharm. 2010;50:126-142. **3.** Wiviott SD. et al. N Engl J Med. 2007;357(20):2001-15.

MEET THE EXPERTS OVER BREAKFAST

Current Issues in the Cardiovascular & Endovascular Interventional Field:
Focus Reviews and Case Presentation with Discussion in a Small Group Environment

Wednesday 25 - Friday 27 I 7:00 AM - 8:10 AM

Wednesday 25

Left Main PCI
Organized by CVRF and Supported by Educational Grant from Abbott Vascular
Coronary Arena, Level 1
Moderators: Young-Hak Kim, Alan C. Yeung

STEMI Care: Treatment Issues
Organized by CVRF
Endovascular Arena, Level 1
Moderators: Sang Hoon Lee, Barry D. Rutherford

Paradigm Shift to Functional Angioplasty: FFR and More
Organized by CVRF and Supported by Educational Grant from St. Jude Medical
Room 3-1, Level 3
Moderators: Seung-Jung Park, Nico Pijls

Antiplatelet Therapies: Expanding Choices & Debates
Organized by CVRF and Supported by Educational Grant from Astrazeneca
Tutorial Arena, Level 4
Moderators: Robert Storey, Ron Waksman

Thursday 26

Techniques for CTO Intervention: "Stay Calm, Be Confident"
Organized by CVRF
Coronary Arena, Level 1
Moderators: Yasushi Asakura, Barry D. Rutherford

Carotid Stenting: "Safe Supply in Carotid Station"
Organized by CVRF and Supported by Educational Grant from Johnson & Johnson Medical Korea
Endovascular Arena, Level 1
Moderators: William A. Gray, Michael R. Jaff

Interventionists' Next Challenges: Renal Artery Denervation and LAA Closure
Organized by CVRF and Supported by Educational Grant from Medtronic Co, Ltd.
Room 1-1, Level 1
Moderators: Maurice Buchbinder, Horst Sievert

Transcatheter Aortic Valve Implantation
Organized by CVRF and Supported by Educational Grant from Edwards Lifesciences Korea and Medtronic Co, Ltd.
Room 2-1, Level 2
Alain G. Cribier, Eberhard Grube

Hot Topics in Coronary CT and MRI
Organized by CVRF
Room 3-1, Level 3
Moderators: Tae-Hwan Lim, Wm. Guy Weigold

STICH or Not STICH
Organized by CVRF
Tutorial Arena, Level 4
Moderators: David Richard Holmes, Robert H. Jones

Friday 27

Recent Advances in Coronary Imaging: IVUS, OCT, NIR, and Next
Organized by CVRF and Supported by Educational Grant from Boston Scientific Korea and St. Jude Medical
Coronary Arena, Level 1
Moderators: Takashi Akasaka, Akiko Maehara

Drug-coated Stent or Balloon for PVD: "Different Story, Same Ending?"
Organized by CVRF
Endovascular Arena, Level 1
Moderators: Mark W. Burket, Andrej Schmidt

Anticoagulant 2012: Dabigatran, Apixaban, Rivaroxaban, and New
Organized by CVRF and Supported by Educational Grant from Bristol-Myers Squibb Korea
Room 1-1, Level 1
Moderators: David Richard Holmes, Robert Storey

Drug-Eluting Stents: Emerging and New Technology
Organized by CVRF
Room 2-1, Level 2
Moderators: Stephen G. Ellis, Mitchell W. Krucoff

Bifurcations PCI
Organized by CVRF and Supported by Educational Grant from Boston Scientific Korea
Room 3-1, Level 3
Moderators: Hyeon-Cheol Gwon, Yves R. Louvard

Medtronic AP Morning Session: DES + ARDIAN(Renal Denervation)
Organized by CVRF and Supported by Educational Grant from Medtronic Co, Ltd.
Tutorial Arena, Level 4
Moderators: Hyo-Soo Kim, Horst Sievert

TCTAP Highlights: Updates and Controversies

Wednesday, April 25, Main Arena, Vista Hall, Level B2, 9:40 AM – 6:30 PM

Multivessel and Left Main Disease

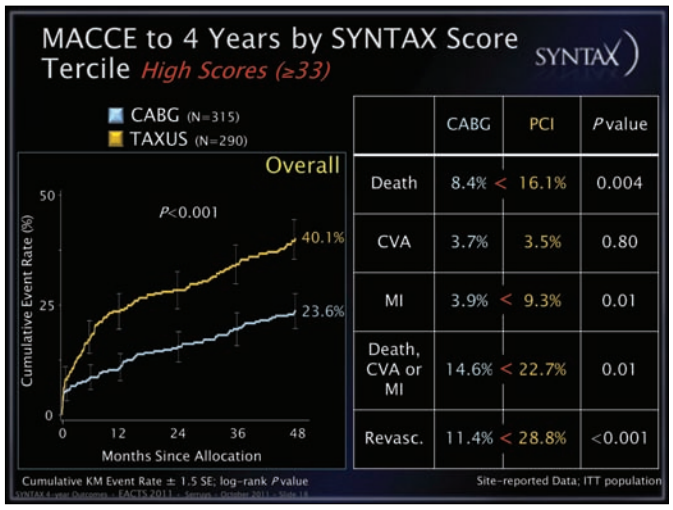
For several decades, coronary-artery bypass grafting (CABG) has been regarded as the treatment of choice for patients with multivessel and unprotected left main coronary artery (LMCA) disease. However, because of marked advancements in techniques of percutaneous coronary intervention (PCI) and CABG as well as adjunctive pharmacologic therapy, a new evaluation and review of current indications for optimal revascularization therapy for multivessel and LMCA disease may be required to determine the standard of care for these patients.

Multivessel Disease

Both CABG and PCI are safe and established treatment modalities of revascularization for patients with multivessel disease. However, conflicting information exists when comparing the long-term efficacy and survival benefits of the two treatment strategies for patients with multivessel disease. The optimal treatment for these patients is still subject to discussion, given the lack of fairly designed, prospective, randomized data reflecting current practice in the modern era. Furthermore, the clinical outcomes after revascularization differ according to the number of diseased vessels, presence or absence of diabetes, left main disease, left ventricular dysfunction and patient preference issue.

Recently four-year results of "the Synergy between PCI with Taxus and Cardiac Surgery (SYNTAX)" trial were presented at the European Association of Cardio-Thoracic Surgery 2011 Annual Meeting. One of the key objectives of this SYNTAX trial is to provide guidance to physicians on optimal revascularization strategies for patients with higher risk lesions. The SYNTAX score was developed to characterize disease complexity of the coronary vasculature with respect to lesion frequency, location, and angiographic complexities. Higher SYNTAX scores are indicative of a more complex overall vascular tree. It is hypothesized that patients with higher scores would have worse clinical outcomes.

At four years, there is no difference in MACCE between CABG and PCI in those with a low (0-22) baseline SYNTAX score (26.1% vs 28.6%; p=0.57), but for those with an intermediate (23-32) SYNTAX score, there was significant difference in MACCE rate (21.5% for CABG vs 32% for PCI; p=0.006). For those with a high SYNTAX score (≥33), mortality was double in the PCI group compared with CABG (16.1% vs 8.4%; p=0.04) and MI was two to three times higher with PCI than with CABG (9.3% vs 3.9%; p=0.01). In this highest-risk group, even the end point of death/CVA/MI becomes significantly higher with PCI, (22.7% vs 14.6%; p=0.01), and MACCE were much higher (40.1% vs 23.6%; p<0.001), driven in large part by a 17% higher rate of revascularization in this high-risk group at four years. These four-



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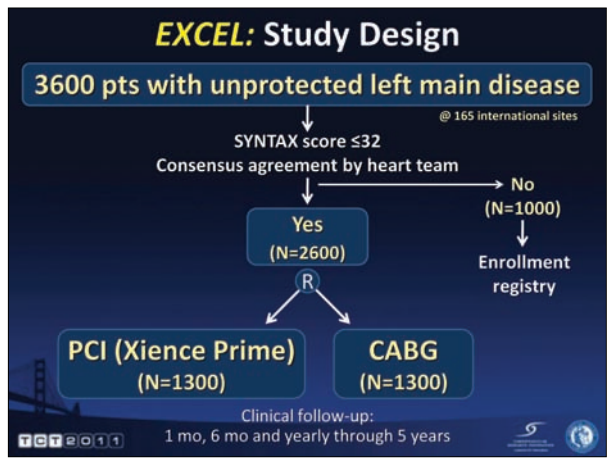
year SYNTAX results suggest that CABG remains the standard of care for patients with complex disease (intermediate or high SYNTAX scores) and PCI may be an acceptable alternative revascularization method to CABG when treating patients with less complex (lower SYNTAX Score) disease. However, the SYNTAX trial was performed using the TAXUS stent (Boston scientific), a first generation drug-eluting stent (DES). Therefore, there is a controversy that there may be a different result if the next generation DES were used.

Left Main Disease

The available current evidence suggests that the composite outcome of death, myocardial infarction and stroke is similar in patients with LMCA disease who are treated with PCI or CABG; the only difference was the rate of repeat revascularization. Although PCI can be performed successfully in most LMCA lesions, "high-risk" anatomic subsets, especially involving distal LMCA bifurcation lesions, continue to present unique technical challenges to interventional cardiologists. Therefore, an integrated approach combining advanced devices, tailored techniques, adjunctive support of physiologic and morphologic evaluation, and adjunctive pharmacologic agents should be reinforced to improve clinical outcomes.

At TCT 2011, four-year results of left main subgroup in SYNTAX trial were presented. At four years, overall MACCE in the PCI group was comparable with CABG (33.2% vs 27.8%; p=0.14) and similar overall safety outcomes (Death/CVA/MI) were observed between PCI and CABG (17.1% vs 17.7%; p=0.79). However, there was a higher rate of revascularization in the PCI group (23.5% vs 14.6%; p=0.003), and a higher rate of CVA in the CABG group (4.3% vs 1.5%; p=0.03). The majority of new events occurred in patients with high SYNTAX scores and PCI outcomes are excellent relative to CABG in LM isolated and LM+1VD. Therefore, SYNTAX trial showed that PCI is a reasonable treatment alternative, in particular, when the SYNTAX score is low (≤22) or intermediate (23-32).

However, SYNTAX trial leaves many questions unanswered: 1) Can PCI outcomes be improved by use of better a DES (e.g. the everolimus-eluting Xience stent), better pharmacotherapy (e.g. bivalirudin), better devices (e.g. IVUS/FFR), more frequent staging procedures in complex disease, or avoidance of routine angiographic follow-up? 2) Can CABG outcomes be further improved 3) Is PCI really non-inferior or superior to CABG in SYNTAX ≤32 patients with LM disease for meaningful primary endpoints (death, stroke and MI)?



"The Evaluation of Xience Prime or Xience V versus Coronary Artery Bypass Surgery for Effectiveness of Left Main Revascularization (EXCEL)" trial is a multicenter, ongoing trial conducted in patients with left main disease and SYNTAX score≤32 to establish the presumptive advantage of PCI versus bypass surgery in patients with less complex coronary artery disease than those enrolled in the SYNTAX trial. Current status of the EXCEL study will be presented by Dr. Gregg W. Stone in TCT Highlights. Current evidence from clinical trials and large off-label experiences showed that PCI can yield comparable safety and efficacy outcomes to CABG, updating the current guideline for LMCA revascularization, which might have prompted many interventional cardiologists to choose PCI as a good treatment option for patients with LMCA disease. However, to get more confirmative answers, large randomized clinical trials with long-term follow-up are needed.

Breakthrough for Transcatheter Valve Intervention? : TAVI

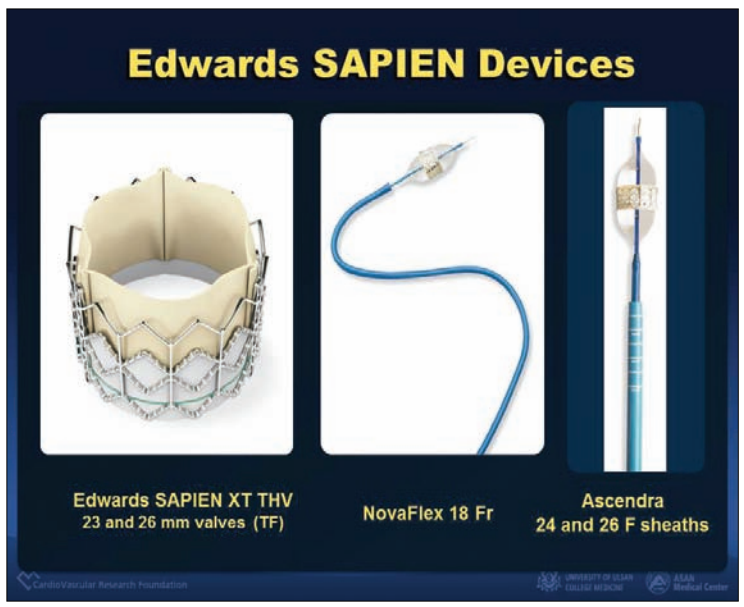
Coronary Arena, Mugunghwa Hall, Level 1, 2:00 PM – 6:00 PM

In the 17th ANGIOPLAST SUMMIT 2012-TCTAP, the latest technical and clinical investment about transcatheter aortic valve implantation (TAVI) will be discussed as a hot topic. On Wednesday afternoon at 2:00 PM in the Coronary Arena, there will be a "Transcatheter Aortic Valve Implantation" session covering tips and tricks for a successful TAVI with Edwards Sapien and Medtronic CoreValve and the prevention of complications such as paravalvular leak, stroke, and conduction disturbance.

TAVI is now a valuable option in the treatment of high-risk severe symptomatic aortic stenosis according to the first randomized trial, PARTNER cohort B, published in the New England Journal of Medicine in 2010. PARTNER cohort A compared TAVI with surgical aortic valve replacement (sAVR) in a high-risk population of patients with severe aortic stenosis. In the intention-to-treat analysis, death from any cause (the primary end point) was not different between the TAVI and sAVR groups at 30 days (3.4% vs 6.5%, respectively) or 1 year (24.2% vs 26.8%, respectively), which led to the conclusion that TAVI was non-inferior to sAVR. Patients in the TAVI group had a shorter length of stay in the intensive-care unit and a shorter index hospitalization compared with patients undergoing sAVR. Bleeding and new onset of atrial fibrillation were more frequent in the surgical group, whereas rates of vascular and neurological complications were higher in the TAVI group. According to the PARTNER trial, US FDA approved the tranfemoral TAVI with Edwards Sapien in patients with inoperable severe symptomatic aortic stensosis since November 2011. Several clinical trials are ongoing worldwide.

Tips and Tricks for a Successful TAVI with Edwards Sapien and Medtronic CoreValve

The first step to successful TAVI is to select suitable patients. Patients are selected for TAVI on the basis of their surgical risk and anatomical suitability. The risk of the patient is generally measured by the logistic European System for Cardiac Operative Risk Evaluation (EuroSCORE) or the Society of Thoracic Surgeons (STS) score. Patients are, broadly speaking, considered suitable if they have a logistic EuroSCORE of ›20% or an STS score of ›10. However, there are inherit limitations in the risk models. Risk models are calculated based on the retrospective data and may not account for the pertinent variables. Moreover, all risk algorithms are based on operated patients and do not factor in inoperable patients and the definitions of variables between the models are often not equivalent and do not include variables that are available but are ignored because they are associated with risks such as frailty index. The anatomical suit-



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Important note: Before prescribing, consult full prescribing information. **Presentation:** Amlodipine (as am odipine besylate) and valsartan 5 mg/80 mg, 5 mg/160 mg, 10 mg/160 mg, 5 mg/320 mg and 10 mg/320 mg film-coated tablets. **Indications/Posology:** Treatment of essential hypertension in patients whose blood pressure is not adequately controlled on anti-hypertensive monotherapy. Recommended dose is one film-coated tablet per day (5 mg am odipine and 80 mg valsartan, or 5 mg amlodipine and 160 mg valsartan, or 10 mg amlodipine and 160 mg valsartan). **Contraindications:** ·Hypersensitivity to any component of Exforge and dihydropyridine derivaties. ·Pregnancy. ·Severe renal impairment and haemodialysis ·Severe hepatic impairment, hepatic cirrhosis and hepatic biliary obstruction. **Warnings/Precautions:** ·Risk of hypotension in sodium and/or volume-depleted patients. ·Beta-blocker withdrawal should be gradual ·Severe renal impairment (creatinine clearance < 10 mL/min) and dialysis. ·No data available in patients with unilateral or bilateral renal artery stenosis, stenosis to a solitary kidney or after recent kidney transplantation. ·Caution in patients with hepatic impairment or biliary obstructive disorders. ·As with all other vasodilators, special caution in patients suffering from aortic or mitral stenosis, or obstructive hypertrophic cardiomyopathy. ·Caution when driving or operating machines. ·Avoid use in women planning to become pregnant and while breast-feeding. Not recommended in patients below 18 years of age. **Interactions:** ·Caution and monitoring of serum potassium levels when used concomitantly with potassium supplements, potassium sparing diuretics, salt substitutes containing potassium, or other drugs that may increase potassium level. ·Concomitant treatment with NSAIDs including Cox-2 Inhibitors may decrease antihypertensive effects. In elderly, volume depleted or compromised renal function, monitoring of renal function recommended when concomitant use. **Adverse reactions:** ·The most common adverse reactions are: Nasopharyngitis, influenza, headache, oedema peripheral, oedema, fatigue, flushing, asthenia, vertigo, tachycardia, palpitations, orthostatic hypotension, cough, pharyngolaryngeal pain, diarrhoea, nausea, abdominal pain, constipation, rash, erythema, joint swelling, back pain, arthralgia. ·Rare adverse reactions but potentially serious are: Hypersensitivity. ·Additional potentially serious adverse experiences reported in clinical trials with amlodipine monotherapy are: Gastritis, gingival hyperplasia, gynaecomastia, leucopenia, myalgia, pancreatitis, hepatitis, thrombocytopenia, vasculitis. Myocardial infarction or increased angina and arrhythmia (including ventricular tachycardia and atrial fibrillation) have also been reported. These adverse events may not be distinguishable from the natural history of the under ying disease ·Additional potentially serious adverse experiences reported in clinical trials with valsartan monotherapy are: Neutropenia. Heart failure patients: >50% increases in creatinine in 3.9% of valsartan-treated patients compared to 0.9% of placebo-treated patients. >20% increases in serum potassium in 10% of valsartan-treated patients compared to 5.1% of placebo-treated patients. >50% increases in BUN in 16.6% of va sartan-treated patients compared to 6.3% of placebo-treated patients. Post-myocardial infarction patients: doubling of serum creatinine in 4.2% of valsartan-treated patients and 3.4% of captopril-treated patients.

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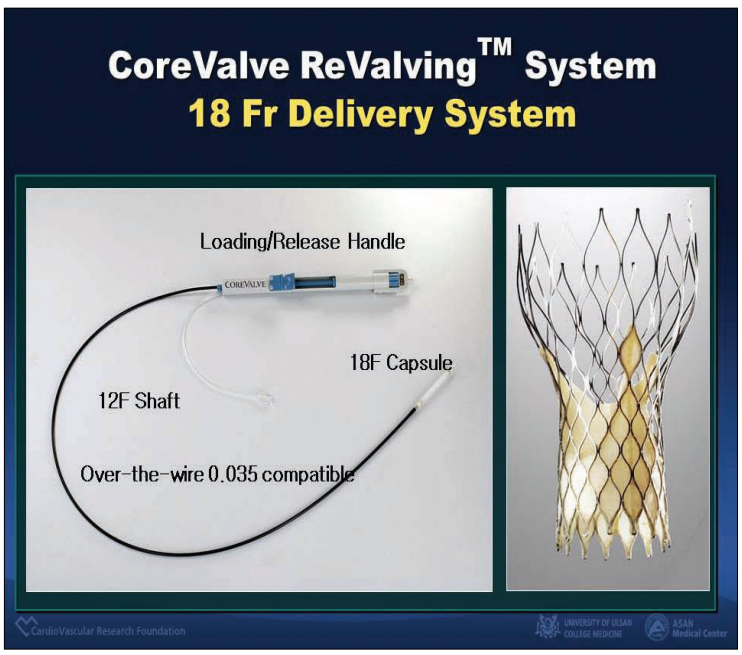
ability is decided after a number of specialized imaging techniques, such as transthoracic and transesophageal echocardiography, coronary and peripheral angiography, and computed tomography. After the risk assessment and the specialized imaging, the patient should be reviewed by a multidisciplinary team to decide on the best approach to the treatment of the aortic stenosis. There are no perfect risk algorithms or tools, therefore, currently available risk algorithms and unaccounted variable index, such as frailty and debility index, are considered together based on the multidisciplinary team approach.

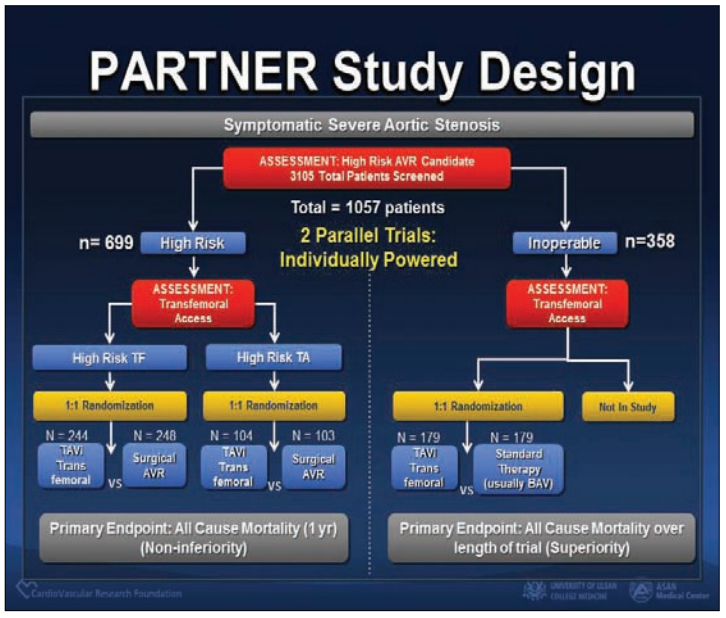
Dr. Eberhard Grube will introduce "Tip and Tricks for Successful TAVI with Medtronic CoreValve" in the Coronary Arena and also Dr. Gerald Yong will give us valuable comments about "Tips for Good TAVI with Edwards Sapien".

Stroke: Etiology and Prevention

Stroke is a potential complication of treating patients with aortic stenosis via TAVI. Although its occurrence is rare, stroke significantly affects survival and quality of life. Strokes during TAVI are multifactorial; the dominant etiology is likely intraprocedure embolic events. A transcranial doppler study during TAVI demonstrated that the majority of procedural embolic events occurred during balloon valvuloplasty, manipulation of catheters across the aortic valve, and valve implantation. Five registries and 1 randomized trial reported stroke outcomes with the Edwards Sapien transcatheter heart valve using a transfemoral approach (TF). Reported strokes in these 5 registries ranged from 2.4% to 6%. In the SAPIEN Aortic Bioprosthesis European Outcome registry, the largest registry of Edwards Sapien TF cases, strokes were observed in 2.5% of patients. Four registries reported stroke-related clinical outcomes with the self-expanding CoreValve system. Looking at outcomes with the first 3 generations of devices in one registry, the overall procedure rate of stroke was 4.4% (6 of 136), but was lower with the third-generation device (2.9% [3 of 102]). In the other registries, 30-day strokes ranged between 1.9% and 4.5% with the TF approach with the 18-F device. The PARTNER trial showed that the rates of major stroke (modified Rankin Scale score of ≥2) was 5% at 30 days and 7.8% at 1 year. In the PARTNER randomized trial of TAVI versus AVR, independent risk factors for early stroke were assigned to TAVI (vs. AVR) and a smaller aortic valve area. Predictors of late stroke (after 30 days) were: 1) history of stroke 6 to 12 months before the procedure 2) non-TF candidate, reflecting a higher burden of atherosclerosis and more frequent vasculopathy and 3) higher New York Heart Association functional class. There were no important differences in the frequency of late stroke between TAVI and AVR patients. In the setting of TAVI, the presence of a major stroke is associated with a poor overall prognosis, and efforts to reduce the rate of stroke after these procedures are ongoing. Because a significant percentage of these strokes appear to be procedure-related and embolic in nature, some have suggested that active protection of the cerebral circulation from embolic debris might be helpful. According to several studies, a high proportion of patients who underwent TAVI have positive neuro-image (MRI, diffusion-weighted MRI), but most of them have no impairment of neuro-cognitive function nor clinical neurologic events associated with MRI defects. Eighty percent of MRI defects were resolved after 3 months of the imaging study. One study showed no difference in development of stroke between TF and transapical approach. Therefore, stroke after TAVI have remained the solving problem and pathophysiology. Dr. Corrado Tamburino will present the "Stroke: Etiology and Prevention" in the Coronary Arena.



Conduction Disturbance: Prevalence and Prevention

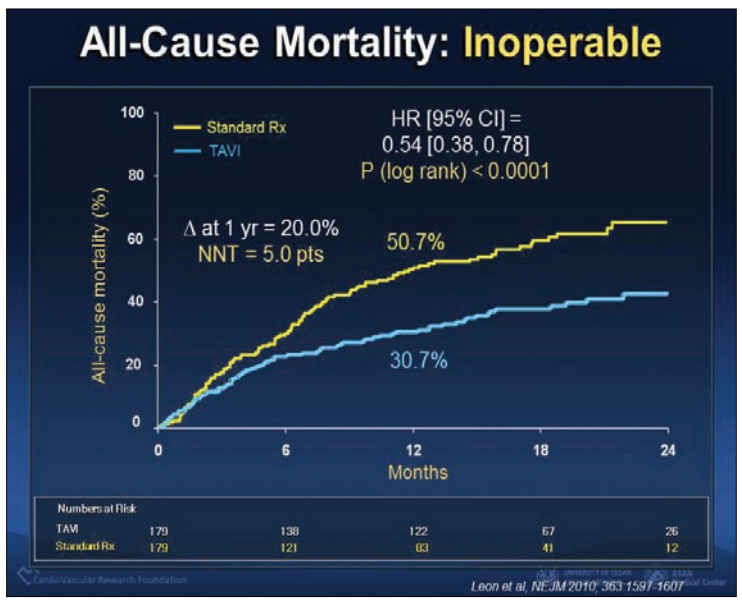


TAVI may give an injury to the atrioventricular conduction system as it courses through the interventricular septum below the aortic valve. In general, an atrioventricular block is a known complication of sAVR with reported incidence up to 8.2%. So far, the rate of new pacemaker implantation with the CoreValve device (9-36%) is clearly higher than the rate reported with the Edwards device (3-12%). Ian T. Meredith will introduce the "Conduction Disturbance: Prevalence and Prevention" in the Coronary Arena.

Future Perspectives in TAVI: Low-risk Patients, Valve-in-Valve, and Aortic Regurgitation

The promise of TAVI is finally becoming a reality in near future; however, enthusiasm must be tempered by scientific rigor and further randomized controlled trials need to be done to further expand the indication for TAVI such as low-risk, valve-in-valve, and aortic regurgitation. With development of device technology and skilled experts, TAVI will be a safer and broader procedure according to the larger clinical trials. After the development of techniques and device technology, the biggest problem to be solved is long-term durability of the mechanical prosthesis. There are many previous studies in this area that comes through the tissue valve through surgical treatment (perimount pericardial bioprosthesis) with data on the replacement of the long-term durability well documented. With more than 18 years to maintain function, the bioprosthetic rate reaches 68% and 62% without reoperation. In particular, over the age of 60 the reoperation rate was closer to 76%. Edward and company announced 20 years worth of data showing a similar figure as above.

Gurvitch released in 2010 on average 3.7 years of data successfully tracking 100 patients who underwent the Edwards valve; the survival rate of 57% and reoperation was 98.5% if lasting. Valve area and hemodynamic parameters were maintained during long-term follow-up. Gerald Yong, Eberhard Grube, Bernard Chevalier, and Martin Leon will be dealing with this hot topic in the Coronary Arena.



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Breakfast Meeting: Debates and Learning

Endovascular Arena, Level 1, 7:00 AM - 8:10 AM

STEMI Care: Bivalirudin, Is It the Standard of Care in the Cath Lab?

Bivalirudin, a direct thrombin inhibitor, has clearly shown to be an effective tool for acute coronary syndromes managed invasively, contemporarily causing fewer hemorrhagic events. In ISAR-REACT 4 Trials, abciximab and unfractionated heparin (UFH), as compared with bivalirudin, failed to reduce the rate of the primary end point and increased the risk of bleeding among patients with NSTEMI who were undergoing PCI. However, its efficacy has been questioned, mostly in cases of inadequate platelet inhibition and during primary PCI due to an increase in acute stent thrombosis. This morning, we will discuss the most recent studies on bivalirudin and debate its routine usage in the catheterization laboratory during STEMI setting. Dr. Adnan Kastrati, who was a chief member of the ISAR-REACT 4 trial investigators from Deutsches Herzzentrum, Technische Universität, Munich, Germany said "Yes, It Should Be Indicated for All Patients with STEMI".

In contrast, Dr. Roxana Mehran, chief member of the HORIZONS-AMI trial investigators from Columbia University, New York-Presbyterian Hospital, New York, NY, USA said "No, Heparin with Provisional GPI Is Still a Viable Option". In the HORIZONS-AMI trial, patients with acute STEMI undergoing PCI, who were treated with bivalirudin, had substantially lower 30-day rates of major hemorrhagic complications and net MACEs than patients assigned to UFH plus a glycoprotein IIb/IIIa inhibitor (GPI). These initial benefits were maintained at 1 year of follow-up. Recently, the HORIZONS-AMI trial investigators released a final report of 3-year outcomes with the effectiveness and safety of bivalirudin monotherapy and paclitaxel-eluting stenting sustained at 3 years for patients with STEMI undergoing primary PCI. However, concerns persist regarding the risk of stent thrombosis in the setting of primary PCI for acute STEMI. In the recent sub-study of the HORIZONS-AMI trial, the 2-year cumulative rates of stent thrombosis were 4.4% with both drug-eluting stents and bare metal stents (P=0.98) and 4.3% versus 4.6% in patients randomized to bivalirudin monotherapy vs. UFH plus a GPI, respectively (P=0.73). Acute stent thrombosis occurred more frequently in patients assigned to bivalirudin compared with UFH plus a GPI (1.4% versus 0.3%; P=0.001), whereas stent thrombosis after 24 hours occurred less frequently in patients with bivalirudin compared with UFH plus a GPI (2.8% versus 4.4%; P=0.02). Pre-randomization heparin and a 600-mg clopidogrel loading dose were independent predictors of reduced acute and subacute stent thrombosis, respectively. They concluded that stent thrombosis is not uncommon within the first 2 years after primary PCI in STEMI, and occurs with similar frequency in patients receiving DES vs. BMS and bivalirudin alone vs. UFH plus a GPI. Optimizing adjunct pharmacology including early antithrombin therapy preloading with a potent antiplatelet therapy may further reduce stent thrombosis in STEMI setting. Anyway, bivalirudin is useful adjunctive tool for primary PCI in STEMI whether or not the patient received pretreatment with heparin. However, the risk of acute stent thrombosis associated with bivalirudin appeared to be mitigated by the prior use of heparin and the risk of subacute stent thrombosis by the use of a 600 mg loading dose of clopidogrel. This data should be confirmed by prospective studies.

Fellowship Training Course

Yesterday, Tutorial Arena , Level 4, Tuesday, April 24, 1:00 PM - 5:00 PM

Yesterday afternoon, the "Fellowship Training Course" was held in Tutorial Arena with hundreds of people in the audience. It was exciting to see and listen to the A to Z of knowledge and technical know-how presented by the most experienced cardiologists; in particular, the step by step learning points, which covered the two main interesting learning subjects: Left Main and Bifurcation intervention. For 4 hours, the world's most qualified leaders in these fields shared their own experiences and provided many tips and tricks by presenting lectures and addressing questions from the audience. In the left main session, anatomy and pathology, non-invasive and invasive functional assessment, risk stratification and updated guidelines for left main intervention were presented and discussed. Then, issues about assessing the morphology and function, experimental results of bifurcation stenting bench test, predictors of restenosis and stent thrombosis and left main bifurcation intervention were presented and discussed in the bifurcation session. Valuable cases were presented for each subject. This session was specially designed for fellows and young cardiologists just starting their career; all the presentations seek to give the attendant an understanding of the techniques performed on a daily basis. "It is hoped that with this educational program, standardized consensus will have been shared in complex coronary intervention and the learning curve will have been transversed to some extent," said Dr. Seung-Jung Park (Asan Medical Center, Korea).

Endovascular Therapy from Carotid to the Below The Knee (BTK)

Wednesday, April 25, Endovascular Arena, Mugunghwa Hall 2, Level 1, 2:00 PM – 6:00 PM

"More Technical, Practical and Applicable Tips and Knowledge"
Come, Learn and See !!!
Finally, feel like you can do it !!!
We prepared dedicated sessions on lesion subset which will be followed by a great live operation.

Lower Extremity Disease from Iliac Artery to BTK

During the past few years, the contents of this meeting has been growing in quality and quantity.

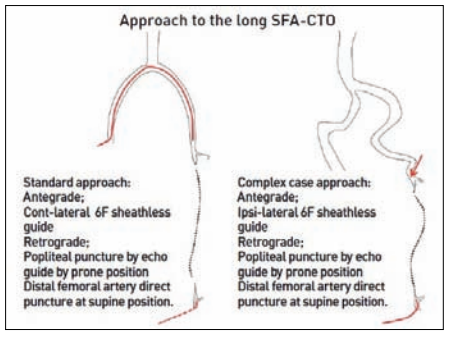
Most of them have been focusing on interventional cardiology for treating coronary, but there might be tremendous interest and development in the field of endovascular therapy, which has contained whole body arteries from carotid artery to below the knee arteries. The current Angioplasty Summit-TCTAP 2012 is also ready to prepare and meet the new era of endovascular therapy in fields with rising interest, including LIVE case demonstrations and dedicated symposiums. We invited world-leading physicians from around the world. Our attendees are eagerly waiting to hear the honorable practices and lectures.

Firstly, we will meet for the session of "Lower Extremity Disease" Wednesday in the Endovascular Arena, Mugunghwa Hall 2, Level 1 from 2:00 – 6:00 PM.

The optimal treatment strategy for ilio-femoral occlusive disease remains controversial. The Bypass versus Angioplasty in Severe Ischaemia of the Leg (BASIL) trial remains the only multi-centre, randomised controlled trial to have compared a bypass surgery (BSX) with a balloon angioplasty (BAP), the first revascularisation strategy for the treatment SLI due to infrainguinal disease. An intention to treat analysis of the BASIL trial has shown that BSX and BAP first strategies lead to similar amputation-free (AFS) and overall survival (OS) out to two years from randomization; although surgery is significantly more morbid and about one-third more expensive in the short term. However, for those patients who survived for more than 2 years after intervention, initial randomisation to a BSX first strategy was associated with a significant increase of 7.3 months in restricted mean OS, and a non-significant increase of 5.9 months in restricted mean AFS during the subsequent follow (average 3.1, range 1 to 5.7 years). Hospital costs and health related quality of life (HRQL) measures were not significant between the two groups over the first 3 years. This data suggests that BASIL-like patients who are expected to live more than 2 years should usually be considered for BSX rather than BAP. In spite of these results, the tremendous endovascular procedures for these lesions have been performed with the development of techniques and devices. Several honorable teachers will present "More Technical, Practical and Applicable Tips and Knowledge" for the evolution of these fields. Dr. Andrej Schmidt (Park Hospital Leipzig, Germany) will review his data and practical tips of "Step-wise Approach of Ilio-femoral CTO Lesions: Antegrade or Retrograde". Endovascular intervention for chronic total occlusion of the SFA is widely spreading. However, various approaches do exist alongside the SFA-CTO; especially the guide wire selection approach, which is completely different with each operation. Recently, the SFA-CTO EVT success rate is 98%. To achieve long CTO recanalization, a bi-directional approach is necessary. There are two hurdles for CTO intervention. First, the CTO artery is not visible by angiography. The operator assumes CTO artery during wire manipulation. This hurdle is going to be resolved using echography when the SFA is not calcified. Echo guide wiring is very useful to visualize the CTO vessel. You just push the wire through the center of the plaque. Hard plaque can be a hurdle in causing the wire to deflect. To break through the core of hard plaque, you need a stiffer wire. Sometimes, this process causes vessel perforation and we have to change to the knuckle wire technique. Subintimal tracking is easily run through the hard plaque, but stenting is necessary because the wire route is subintimal. Tough lesions are graft occlusions with SFA CTO.

The anastomosis site is severely fibrosed and usually the Z shape native artery deformity that was caused by pulling the anastomosis site is occluded by artificial grafts. Physically, the stiff wire does not cross the Z shape curved artery. In a situation of failed antegrade recanalization, as an alternative to a conventional trans-popliteal approach, the retrograde SFA puncture distal to the adductor canal with the patient remaining supine is a safe and a successful technique that represents a convenient alternative to the conventional transpopliteal approach.

As for the coronary situation, the drug-coated balloon angioplasty and drug-eluting stent implantation have been evaluated as the default strategy for the inhibition of neointimal hyperplasia. Mark W. Burket (The University of Toledo Medical Center), a specialist, will focus the drug-effect in the femoropopliteal lesions. The concept of drug-eluting devices is promis-



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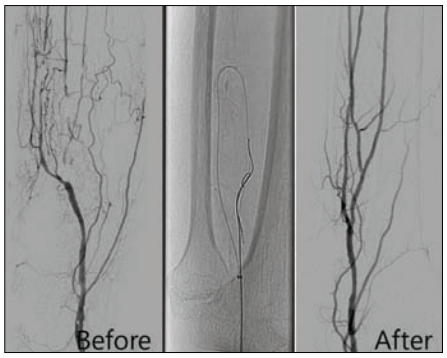
ing and early clinical data make it appealing for use in peripheral vascular disease. The evidence on the use of anti-proliferative stents or balloon catheters in preventing restenosis in lower limb atherosclerosis is slowly emerging, and may give guidance of their use in the future. Dr. William A. Gray (New York Presbyterian Hospital, Columbia University Medical Center) also will show "ACTIVE Study: Co-Cr Balloon Expandable Stent: What Advantages over Standard Self-expandable Stent?" In that session, Lawrence. A. Garcia also will touch upon the fundamental question: "Is there a default gold standard in the lower limb for revascularization?" After the session, the very educational and typical two cases of ilio-femoral artery lesions will be performed by Richard R. Heuser (St. Luke's Medical Hospital & Medical Center) and Kazushi Urasawa from Asan Medical Center. Please, learn from and see this great performance!!!

After the ili-femoral lesion coverage, the infra popliteal lesion will be covered, which has surprisingly increased and positioned as very important because of the limb salvage. Dr. Andrej Schmidt will cover "Drug-eluting Balloon or Stent: How Will It Shift Paradigm in BTK Lesions?". Due to the limited patency after just balloon angioplasty, drug-eluting balloon or stenting might be thought of as the promising strategy for the maintenance of vessel patency and save of the limb. They reported already "Single-center study of 104 pts (109 limbs) with long, below-the-knee lesions treated with paclitaxel-coated balloon." On 3-month angiography, restenosis was 27.4% (61% reduction compared to similar pts treated with standard angioplasty) TLR at 1 year was 17.3% (65.4% relative reduction); clinical improvement was noted in 91.2% of treated limbs. Mortality at 1 year was 16.3%. They concluded that the early restenosis rate of long-segment infrapopliteal disease is significantly lower after treatment with drug-eluting balloons compared with historical data using uncoated balloons. Also, many trials comparing bare-metal stent and drug-elutng stent using sirolimus and everolimus also showed promising results for the patency. There are still controversies in spite of better patency because clinical outcomes, including amputation, did not differ significantly between the two groups.

The incidence of 'Critical Limb Ischemia" is still increasing up to 1 in every 100 patients with peripheral artery disease; in case of diabetes, the risk may be increased up 5 to 10 fold. Usually CLI occurs when the essential supply of nutrients falls below the cut-off level that will sustain tissue viability: ankle systolic pressure ‹ 50 mmHg in nondiabetics and toe systolic pressure ‹ 30 mmHg in diabetics. The CLI presented with chronic ischemic rest pain, ischemic ulcer and ischemic gangrene. Only 50% of patients with CLI will be alive with 2 limbs at 6 to 12 months after diagnosis, but 12 to 18% will die and 30 to 35% will undergo amputation; among them only 22% will walk again and 30% will stay bed-ridden. To open the occluded artery, many trials must be attempted, but the success rate would not be optimistic. It is the same situation with coronary chronic total occlusion. Various methods during the intervention have been developed. Dr. Issam D. Moussa, Young-Guk Ko and Gian Battista Danzi, who all have lots of experience with cases, will focus on the intervention techniques and management of complication during intervention.



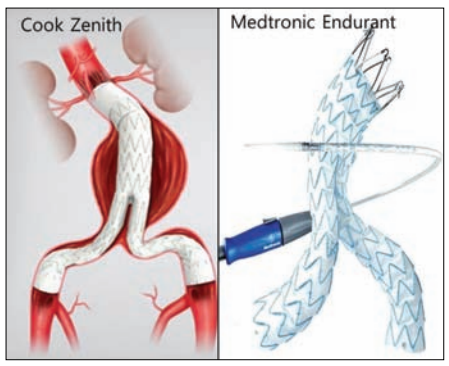
Abdominal Aortic Aneurysm

Thursday, Endovascular Arena, Mugunghwa Hall 2, Level 1 during 8:30 – 12:30 PM

The day after of "Lower Extremity Artery Disease", we also prepared endless concerns about optimal management, which would be better between surgery versus stenting and patient selection, who would be beneficial if treatment will be adopted.

Round one is Abdominal Aortic Aneurysm; Identifying Complications and the Management of Open and Endovascular AAA Repair. We are now almost 20 years after the procedure of endoluminal grafting or nonsurgical sealing of abdominal aortic aneurysm was first introduced. To say this procedure has revolutionized the treatment of this problem is an understatement. Most patients who present an abdominal aortic aneurysm are at least given an option for a nonsurgical, surgical or endovascular repair. Of course, as with any new technology, new technology results in new complications. The complications that most people deal with are two types: acute and chronic. An acute complication usually means that there is a tear in the lumen or the endo-luminal repair failed, both resulting in acute surgery. This complication is rare. More common are endo-leaks which can result in the performance of repair procedures in the future. Dr. Michael R. Jaff (Massachusetts General Hospital) will present the "Defering AAA Repair: Best Medical Management Based on EBM" and Lawrence A. Garcia and Richard R. Heuser (St. Luke's Medical Hospital & Medical Center) also will cover the current role and complications of EVAR procedure.

A great performance using two types of EVAR grafts by Dr. William A. Gray will be open to audiences looking forward to this procedure.



Carotid Artery Stenosis

Round two is Carotid Artery Disease:

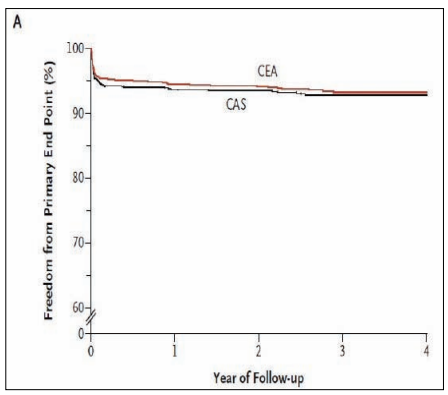
Which strategy will be superior or which patient subset will be beneficial by selecting one strategy?

There is endless fighting and controversy. There have been so many trials comparing the two strategies, but we don't have any confirmative answers because all trials have different patient characteristics such as symptom status and surgical risk and use different procedure devices such as the use of embolic protection device and types of stent. Lastly, the experience also might work the inconsistent answers. There is a great deal more information on the relative efficacy of stenting and endarterectomy that will emerge from the ongoing analysis of the data. Much has changed in stenting over the last 10 years, so I might also add that if we were to begin a similar study today, we might even be able to demonstrate that stenting is superior to endarterectomy.

Dr. Willim A. Gray, who designed and conducted the CREST trials, will briefly review the 3-representative randomized trials about carotid artery disease and might give some clues on "how shall we change our practice?".

The Carotid Revascularization Endarterectomy vs. Stenting Trial (CREST) randomized 2,502 patients with either symptomatic or asymptomatic disease to carotid endarterectomy or stenting. Overall, there was no significant difference in the estimated 4-year rates of the primary endpoint (composite of any periprocedural stroke, MI, or death, or the incidence of ipsilateral stroke ≤ 4 years) between the 2 groups.

Safety data from the International Carotid Stenting Study (ICSS), comparing carotid endarterectomy with stenting in patients



with recently symptomatic carotid stenosis eligible for either procedure, shows superior results with surgery, at least at 30 days post-procedure. The ICSS trial is a randomized double-blind study comparing stenting with endarterectomy in patients with symptomatic carotid stenosis of greater than 50% within 6 months prior to randomization. At total of 1,710 patients were included in the intention-to-treat analysis, 853 randomized to stenting and 857 to surgery. The investigators concluded carotid endarterectomy superior to stenting, at least in the short term. ACT I is a new clinical study in carotid artery disease. The ACT I study will compare carotid artery stenting (CAS) to carotid endarterectomy (CEA) surgery for the treatment of patients who are symptom-free and at standard risk for surgery. Enrollment for the ACT I study is now underway. Up to 2,058 patients will be enrolled in at least 50 sites throughout North America. This trial is actively enrolling patients.

[Program]

Catheterization Laboratory Activities

- Live Case Demonstration
- Hands-on Experience in Cath lab
- Free Discussion in the Training Center during the Procedure
- Visiting Professors' Activities: Case Demonstration & Featured Lecture
- Dynamic Round Table Discussions
- Case Presentation & Discussion

and much more...

Evidence-Based Lectures

- Core Lab Analysis
- DES Issues
- Complex Angioplasty
- ACS Guideline
- Preventive Medicine
- Transcatheter Valve Therapies

and much more...

[Yearly Plan for 2012]

Section	Dates
40th	January 9(Mon.) ~ 10(Tue.)
41st	January 30(Mon.) ~ February 2(Thu.)
42nd	February 18(Sat.)
43rd	March 19(Mon.) ~ 22(Thu.)
44th	May 7(Mon.) ~ 10(Thu.)
45th	June 11(Mon.) ~ 14(Thu.)
46th	July 9(Mon.) ~ 12(Thu.)
47th	August 6 (Mon.) ~ 9(Thu.)
48th	August 20 (Mon.) ~ 23 (Thu.)
49th	September 3(Mon.) ~ 6(Thu.)
50th	September 24(Mon.) ~ 27(Thu.)
51st	October 15(Mon.) ~ 18(Thu.)
52nd	November 12(Mon.) ~ 15(Thu.)
53rd	December 10(Mon.) ~ 13(Thu.)

*The schedule is subject to change.

[Registration Site & Contact]

Attn: Ms. Hyerim YUN (CVRF)
Tel: 82-2-3010-4792, Fax: 82-2-475-6898,
Email: yuyun@summitMD.com

For more information, please visit to www.cvrf.org

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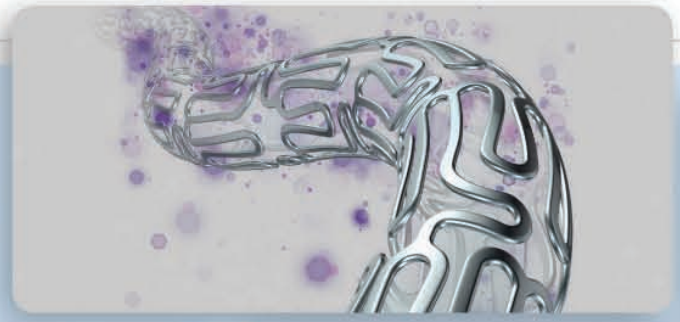
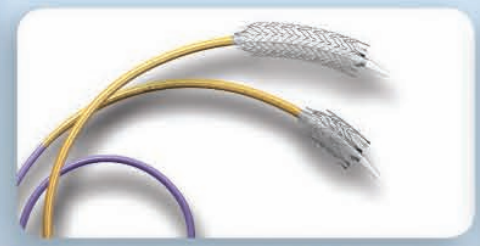
Discovering new and better ways to advance vascular care is the heartbeat of our work. Our focus is on breakthrough scientific research that drives innovation from products to medical education.

Our mission is to deliver solutions that make a difference in the treatment and care of people all over the world.





Visit our booths **B02-05** at AS TCTAP to discover how innovations deliver solutions

Today – Wednesday 25th April

DES Luncheon Symposium 12:30 - 13:30 Coronary Arena

- Safety, First
  Moderator : Hyeon-Cheol Gwon & Chuck Simonton
- New insights regarding the safety and efficacy of DAPT after stenting - Gregg W. Stone *(Columbia University Medical Center, Cardiovascular Research Center, USA)*
- The safety of second generation DES : Is it better now? - Hyeon-Cheol Gwon *(Samsung Medical Center, Korea)*
- Abbott Vascular future pipe-line - Chuck Simonton *(Abbott Vascular, USA)*

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