



Today's Highlights

Breakfast Meetings

Meet the Experts over Breakfast #15-#20
7:00 AM - 8:10 AM

Challenging Case Competition with Experts' Focus Review

Coronary Arena & Endovascular Arena,
8:30 AM - 3:50 PM

5th Caridopulmonary Rehabilitation Workshop

Tutorial Arena, Level 4, 8:25 AM - 3:30 PM

Angioplasty Summit 2011 KCTA Symposium

(14th Annual Conference for Cardiovascular Nurse & Technologist)

Main Arena, Vista Hall, Level B2,
12:30 PM - 4:05 PM

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14th Annual Conference for Cardiovascular Nurse & Technologist

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Lessons from Five Late-Breaking Clinical Trials
Zilver PTX Stent Showed Beneficial Effect at 24-month Follow up

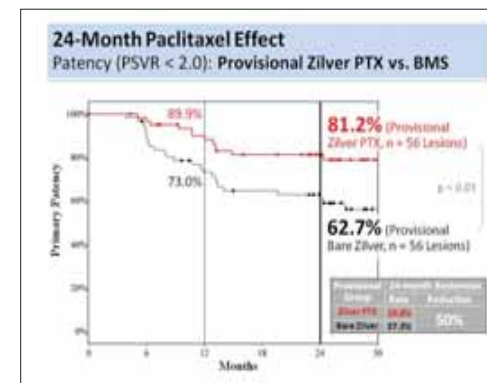
Zilver PTX Randomized Trial of Paclitaxel-Eluting Stents for Femoropopliteal Artery Disease: 24-Month Update

Mark W. Burket, MD

Dr. Mark W. Burket from University of Toledo Medical Center, US presented 24-month updated data of Zilver PTX Randomized Trial of Paclitaxel-Eluting Stents for Femoropopliteal Artery Disease yesterday. The Zilver[®] PTX[®] stent with polymer-free paclitaxel coating is the first drug-eluting stent approved (currently CE marked, investigational in the United States and Japan) for the superficial femoral artery (SFA). This multicenter, multinational, prospective, randomized trial compared the safety and effectiveness of the Zilver PTX study to balloon angioplasty (PTA) and bare metal stenting (BMS). Dr. Burket and colleagues randomized symptomatic patients with SFA lesions (de novo or non-in-stent restenosis) to PTA or Zilver PTX stent placement. PTA patients experiencing acute failure (e.g. >30% residual stenosis) underwent secondary

randomization to provisional stenting with Zilver BMS or Zilver PTX. Follow-up included event-free survival (EFS), and primary patency by Duplex ultrasound core laboratory analysis (peak systolic velocity ratio <2.0). 479 patients were enrolled at 55 institutions in the United States, Japan and Germany, with 241 patients randomized to the Zilver PTX group and 238 to the PTA group. Demographics and lesion characteristics (e.g. lesion length 66 mm and 63 mm, respectively) were similar for the groups. Approximately half the PTA group experienced acute failure and underwent secondary randomization; 59 and 61 patients were assigned to provisional stenting with Zilver BMS and Zilver PTX, respectively. The study results met the 12-month primary endpoint goals showing non-inferior EFS (90.4% versus 82.6%, p<0.01) and superior primary patency (83.1% and 32.8%, p<0.01) for the Zilver PTX compared to PTA. The randomized comparison of provisional stenting with Zilver PTX versus Zilver BMS also showed significant paclitaxel coating benefits, with 12-month patency rates of

89.9% and 73.0% respectively (p=0.01). Currently, 24-month follow-up is available for 278 patients, showing an 86.6% EFS rate and a 74.8% patency rate. The randomized comparison of provisional stenting with Zilver PTX versus Zilver BMS continues to demonstrate significant paclitaxel coating benefits at 24 months, with patency rates of 81.2% and 62.7% respectively (p<0.01). Dr. Mark W. Burket concluded that the results of this randomized, multicenter study support the safety and effectiveness of the Zilver PTX Drug-Eluting Peripheral Stent.



Figure

Evaluation of LMCA Revascularization by CT Angiography from PRECOMBAT Trial

Joon-Won KANG, MD

Conventional coronary angiography (CAG) is recommended 2 to 6 months after left main coronary artery (LM) stenting due to the

unpredictable occurrence of in-stent restenosis (ISR). However, CAG for the LM stent has some risks and complications, of which are caused by some complications from the pro-

trusion of the stent to the ascending aorta. Computed tomography coronary angiography (CTCA) is a promising technique for noninvasive coronary evaluation. Dr. Kang and col-

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CardioVascular Research Foundation (CVRF)

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

• Please visit CVRF booth at #D1 on the bridge toward Exhibit Hall 2 for our special events during TCTAP2011





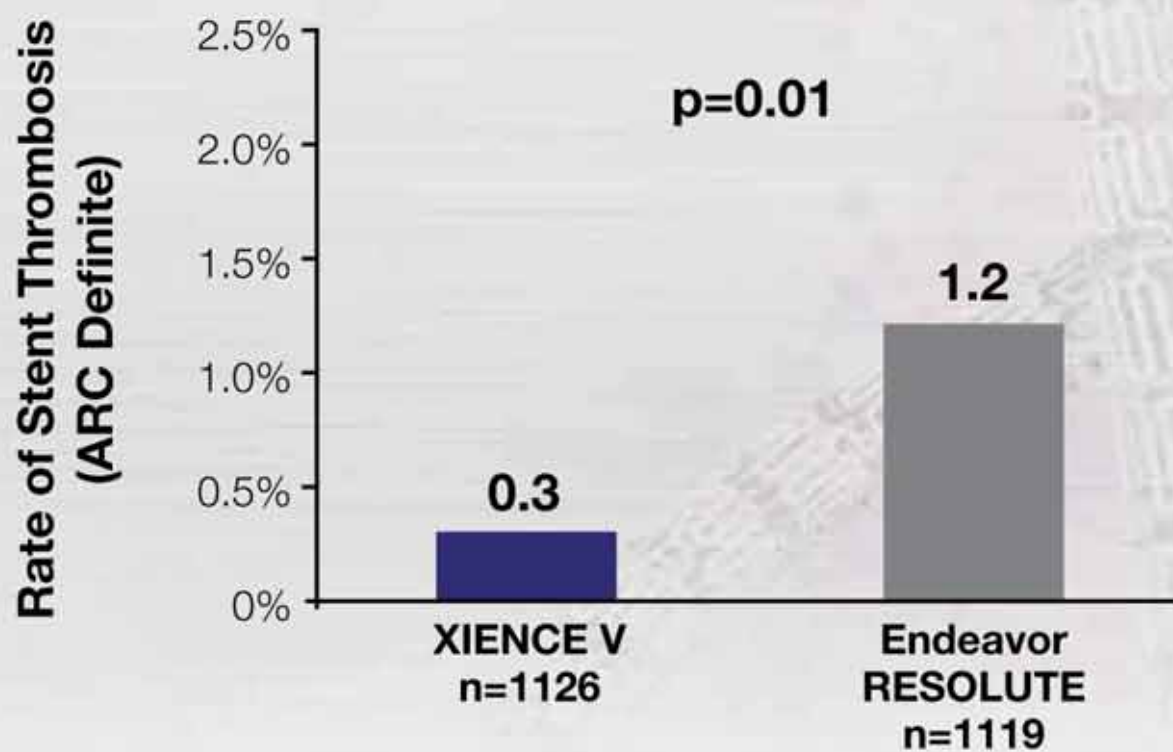
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leagues evaluated the diagnostic performance of high-resolution MSCT to detect ISR after stenting of the LM. 148 patients were prospectively identified in the patient population from the PRE-COMBAT study underwent CTCA before being scheduled for follow-up CAG after LM stenting. Among them, patients with time interval between CTCA and CAG within 1 month were included for analysis (n=48). Twenty-two patients had a Cypher® stent and 26

had a Xience® stent. From December 2009 until July 2010, a dual-source scanner, equipped with 2 sets of 64 slice detector system was used for CTCA. MSCT correctly identified 3 patients with ISR (4 of 48) but misclassified 2 patients (1 false-positive and 1 false-negative). Overall, the accuracy of CTCA for the detection of angiographic ISR was 95.8%. The sensitivity, specificity, positive and negative predictive values were 75%, 97.7%, 75%, and 97.7%,

respectively. One false positive was from the patient with a Cypher® stent because of beam-hardening artifact, and one false positive was the patient with a Xience® stent caused by the small diameter of the distal stent segment of the stent. Twenty-seven of 48 LM stents were protruded into the ascending aorta. The length of the stent in the CT measurement was longer than in IVUS. For the assessment of stent diameter and area, MSCT showed

good correlation with IVUS, but the cross-sectional area from CTCA was underestimated. CTCA allows reliable noninvasive evaluation of selected patients after LM stenting. CTCA is safe to exclude left main ISR and may therefore be an acceptable first-line alternative to CCA. Beam-hardening artifacts can lead to false results. The diagnostic accuracy of CTCA will be higher with the technique of high-density CT and reducing the beam-hardening artifact.

Complete Revascularization for Multivessel Disease: Does it improve outcomes?

Impact of Angio-graphic Complete Revascularization after Drug-Eluting Stent Implantation or Coronary Artery Bypass Surgery for Multivessel Coronary Disease

Young-Hak Kim, MD



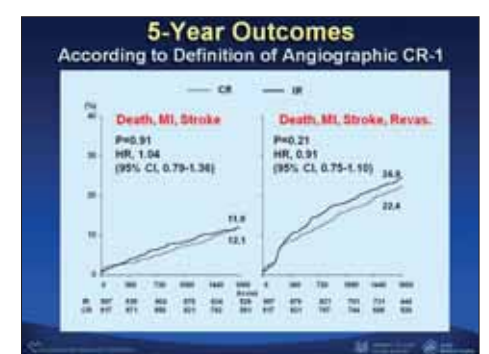
Dr. Young-Hak Kim of Asan Medical Center, Republic of Korea presented the impact of angiographic complete revascularization (CR) in patients with multivessel coronary disease (MVD) in the late breaking trial. Traditionally, CR strategy has been associated with better long-term clinical outcomes after percutaneous coronary intervention (PCI) or coronary artery bypass graft (CABG) surgery in patients with MVD. Dr. Young-Hak Kim and colleagues therefore, evaluated the long-term clinical impact of angiographic CR, as compared with IR (incomplete revascularization), in patients receiving PCI with DES or CABG for MVD. They included consecutive 1,914 patients undergoing DES implantation (1,400 patients) or CABG surgery (514 patients) in the Asan Medical Center

between January 2003 and December 2005. Dr. Kim used four definitions of CR depending on the angiographic assessment in the SYNTAX segments. For instance, angiographic CR-1 was defined as angioplasty or grafting in all diseased coronary segments (≥ 1.5 mm), angiographic CR-2 as revascularization in all diseased segment ≥ 2.5 mm, proximal CR as revascularization in the diseased proximal arteries, and multivessel IR as incomplete revascularization ≥ 2 diseased vessels. Angiographic CR-1 and -2 were performed in 917 (47.9%) and 1,127 (58.9%) patients, including 573 (40.9%) and 721 (64.0%) PCI and 344 (66.9%) and 406 (79.0%) CABG patients ($p < 0.001$). CR patients were younger and had higher body mass index, prior angioplasty, less extensive coronary disease and were treated with fewer stents than IR patients. Proximal CR was possible in 1,194 (62.4%) patients, including 792 (56.6%) PCI and 402 (78.2%) CABG patients ($p < 0.001$). Multivessel IR was observed in 24.6% PCI and 4.7% CABG patients ($p < 0.001$). The patients were followed over 5 years and the outcomes of CR patients were compared with IR patients after adjustments with the inverse-probability of treatment weighting method. Over 5 years, CR patients had comparable incidences of death (8.9% vs. 8.9%;

adjusted hazard ratio [HR], 1.04; 95% confidence interval [CI], 0.76-1.43; $p = 0.81$) and composite of death, myocardial infarction (MI), and stroke (12.1% vs. 11.9%; adjusted HR, 1.04; 95% CI, 0.79-1.36; $p = 0.80$), and composite of death, MI, stroke and repeat revascularization (22.4% vs. 24.9%; adjusted HR, 0.91; 95% CI, 0.75-1.10; $p = 0.32$) compared with IR patients according to the angiographic CR-1 definition. Angiographic CR-2 and proximal CR were also not associated with the risks of the composite of death, MI and stroke, and the composite of death, MI, stroke and repeat revascularization. However, 368 (19.2%) patients with multivessel IR had a tendency of higher risk of death, MI, stroke or repeat revascularization (30.3% vs. 22.1%; adjusted HR, 1.27; 95% CI, 0.97-1.66; $p = 0.079$) than those without multivessel IR.

These analyses showed that anatomical CR for all angiographic stenoses did not improve the long-term clinical outcomes after either PCI or CABG in patients with MVD. In patients with extensive coronary artery disease, however, multivessel IR may be associated with unfavorable long-term clinical outcomes. Dr. Young-Hak Kim suggested that a lack of association may be related to limitations in the angiographic evaluation of ischemia. To support this hypothesis, he introduced the FAME

study comparing outcomes of fractional flow reserve-guided and angiography-guided PCI for 1,414 coronary lesions. In this study, only 35% of the lesions with angiographic stenosis of 50% to 70% were functionally ischemic by fractional flow reserve. Since 47% of lesions in the FAME study had angiographic stenosis of 50% to 70%, angiographic CR may have an inherent limitation in predicting clinical outcomes. In addition, he suggests that the strong benefit of the left internal thoracic graft is maintaining long-term patency of the left anterior descending artery and subsequently relieving large ischemia of the left ventricle compensated by the benefit of CR. Therefore, Dr. Kim concluded that "the risks and benefits of revascularization treatment may be balanced by an ischemia-guided revascularization strategy".



Figure

Dynamic Change of Wall Shear Stress after Stenting Bifurcation Lesions: Subgroup Analysis from DKCRUSH-II Trial



Shaoliang Chen, MD Wall shear stress (WSS) plays a critical role in the development of coronary bifurcation lesions.

However, there is lack of data regarding the hemodynamic change of WSS after different stenting techniques for bifurcation lesions. Shaoliang Chen, MD, from Nanjing First Hospital, China investigated the hemodynamic change of WSS in patients with coronary bifurcation lesions treated by double

kissing crush (DK group) or One-stent with final kissing balloon inflation. Dr. Shaoliang Chen and colleagues identified eighty-one patients (48 in DK, 33 in One-stent group) having serial angiography (baseline, post-stenting and at-8-month follow-up) from the DKCRUSH-II study. They reconstructed a 3-D

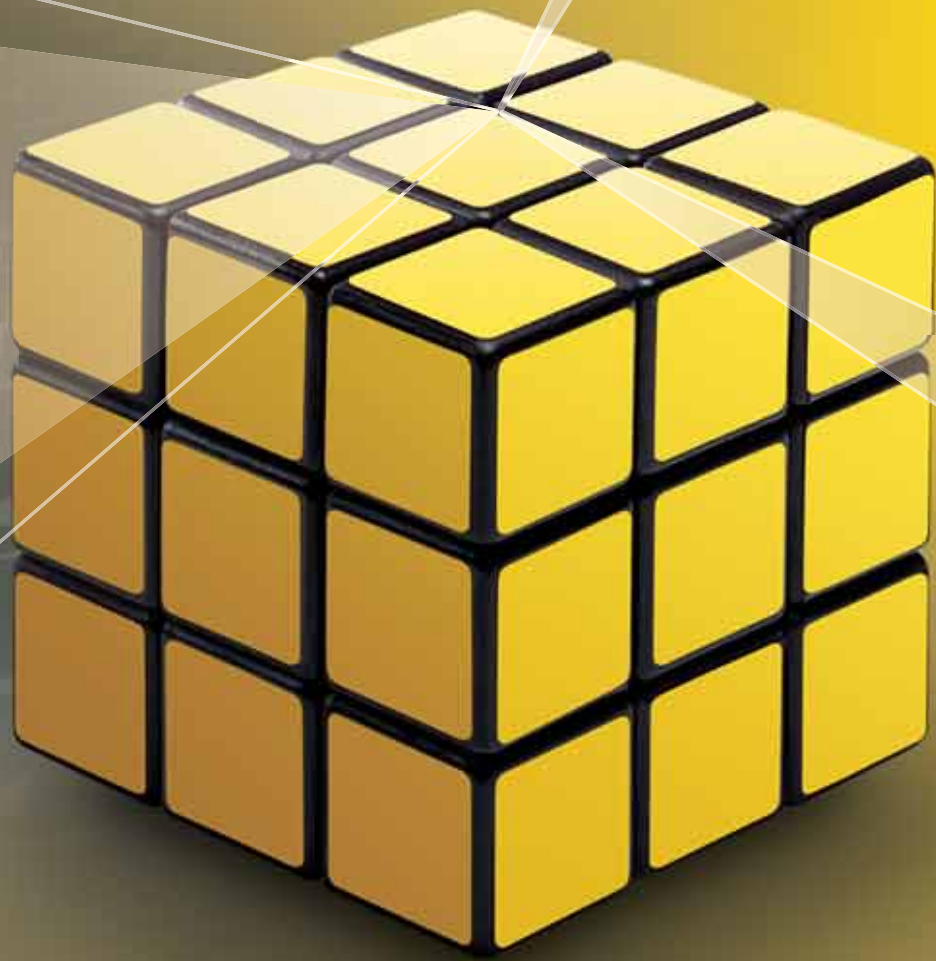
model from the angiograms at the end-diastolic stage of the cardiac cycles. The whole vessel involved by bifurcation lesions was divided into: proximal main vessel (MV), distal main branch (MB), side branch (SB), and polygon of confluence (POC, further into POC-MV, POC-MB and POC-SB). MB and SB

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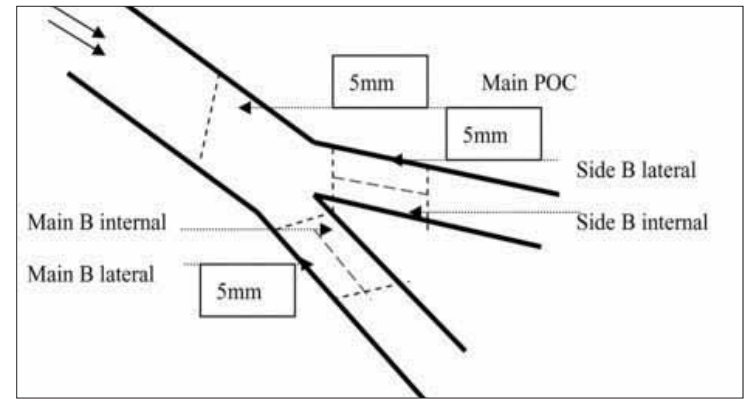
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were classified by internal- and lateral-sub-segments, respectively (Figure). The turbulent index was defined as maximal minus minimal WSS value at the same site. The gradient of WSS was calculated as the difference of average WSS between two adjacent segments. Dr. Chen used the receiver operator curve (ROC) for the comparison of the predictive value of variables for in-stent restenosis (ISR). The baseline magnitude of WSS in proximal MV, POC-MV, POC-MB, POC-SB and MB-internal segments

increased significantly, compared to MB-lateral (7.69 ± 9.61 Pa), SB-internal (7.36 ± 6.52 Pa) and SB-lateral (5.61 ± 5.57 Pa, p all < 0.001). Stent implantation was associated with a significant reduction of WSS which was sustained through the whole follow-up. DK crush stenting had the potential of uniformly reducing WSS, turbulent index and WSS gradient. The turbulent index in SB-lateral and average WSS gradient between POC-SB minus SB-lateral had an equal predictive value for ISR (95% CI

$-0.12-0.11$, $Z=-0.13$, $p=0.896$). Dr. Chen concluded that stent implantation is associated with a significant reduction of WSS. Fluid dynamic results favor the use of DK crush over one-stent technique.



Figure

Moving Towards Biomimicry-Development of Novel BioMime™ Sirolimus Eluting Coronary Stent System



Upendra Kaul, MD
Chairman and Chief Cardiologist,
Cardiology Council,
Fortis Group of Hospital, Escort
Heart Institute and Research Center,
New Delhi, the principal investigator for the
MeriT-1 trial.

Since the first reported use of percutaneous transluminal coronary angioplasty (PTCA), advances in the interventional cardiology arena have been fast-paced. Within the last 10 years, these developments have been exponential. Developers and clinicians are fast adapting from the learning curve awarded by the time-course of drug-eluting stent (DES) evolution. However, first-generation DESs were linked with late stent thrombosis and were created on bulky stent platforms with questionable deliverability and polymer biocompatibility.

Stent induced arterial injury is an important determinant of restenosis. Platelet deposition, thrombus formation & smooth muscle cell proliferation begin in response to arterial injury. Stent implantation imparts extreme vascular strain & focal mechanical injury to the vessel wall. The amount of injury inflicted by the stent & balloon is a function of stent-balloon geometry. Literature over the past decade has demonstrated that low strut thickness of a stent allows for low injury during angioplasty and superior conformability allows for early endothelialization. These result into favorable clinical outcomes. In that light Sirolimus eluting stent comes as a fresh thought in taking stents towards a

BioMime™ biomimicry concept. A novel concept has been developed since 2007 in creating a low injury coronary stent system which allows for superior conformability and early endothelialization thereby demonstrating high safety and efficacy. The primary design platform has been the CE approved NexGen™ Cobalt Chromium (L605) alloy stent which has good acceptance in various markets since 2008. Built on that sound NexGen™ stent technology, a new generation DES – BioMime™ Sirolimus Eluting Coronary Stent System has been successfully developed and is now CE approved.

The stent is built on an ultra-low strut thickness (65 μm) cobalt chromium stent platform, using an intelligent hybrid of close and open cells allowing for morphology mediated expansion, employs a well known anti-proliferative – Sirolimus that elutes from a biodegradable co-polymer formulation in 30 days and ensures high coating integrity and a low coating thickness of 2 μm. The resultant stent demonstrates almost 100% endothelialization at 30 days in pre-clinical models.

Subsequent clinical trials conducted in India went on to prove that BioMime™ has exceptional scientific basis with demonstrable clinical evidence. Clinical trials include a single, de-novo, non-complex lesion study involving 30 patients. Here BioMime™ demonstrates high safety of 0% MACE and 0% stent thrombosis at 1 year while maintaining a high efficacy standard of 0.15 mm late luminal loss at 8 months QCA and 0% binary restenosis or target lesion (TLR) or target vessel revascularization (TVR). In a larger study involving 250 patients, conducted in 12 high volume operating centers across

India, multi-vessel disease with varied lesion morphologies were treated with BioMime™. Roll-in phase data reveal similar safety and efficacy data. Major adverse cardiac events (MACE) were found to be 2.6% (0.87% non-cardiac death and 1.7% TLR). This study reports a high efficacy of 0.18 mm late luminal loss at 8 months QCA. BioMime™ has been found to be safe and efficacious in pre-clinical models and in the primary safety and efficacy study. Notable is the 0% rate of MACE at six months. Data

from a large multicenter trial involving 250 real-world patient will further establish its credibility in routine clinical practice. Hence, based on the available pre-clinical and initial clinical reports, it can be predicted that this third-generation DES has adapted from the learning curve of the past DES and will set a path for the biomimicry concept in DES design for future.

Are you looking for CVRF's News and Events?



INSIDE TOPICS

- Randomized Trial of Stents vs. Bypass Surgery in Left Main Coronary Disease : The PRECOMBAT Trial Results Published in the New England Journal of Medicine
- Program Highlights : The 16th ANGIOPLASTY SUMMIT-TCTAP 2011
- CVRF NEWS
- CLINICAL RESEARCH
- MEETINGS UPDATE

Visit CVRF booth (D1) and find **The Heart Beat!**

Yesterday's Hot Lives

Vertebral Artery Stenting at the Ostium of Left Vertebral Artery

Yesterday, Dr. Paul Hsien-Li Kao (National Taiwan University Hospital, Taiwan) and Woo Young Chung (Seoul National University Boramae Hospital) treated a left vertebral artery disease. Three months ago, a 58-year-old man was admitted another hospital with. Coronary CT showed significant stenosis at proximal to mid LAD and proximal RCA. In addition, brain CT/MR angiography showed severe stenosis in left vertebral artery ostium. One month ago, he was admitted our hospital with resting chest pain and received PCI at proximal to mid LAD (Endeavor Resolute 3.0*30 mm and 3.5*26 mm) and proximal RCA (Endeavor R 3.5*30 mm). His coronary risk factor were hypertension, diabetes, hypercholesterolemia, and ex-smoking.

A 7 Fr sheath was inserted into right femoral artery. Sequentially, left vertebral artery was engaged with 6 Fr JR4 diagnostic catheter with 0.032 inch terumo wire 260 J and performed left vertebral angiogram (Figure 1). After changing to 7 Fr JR4 guiding catheter, left vertebral artery was reengaged with 0.032 inch terumo wire 260 J. For checking patient's condition, Dr. Kao frequently asked him to squeezing ball. A 0.014 inch 190 cm FilterWire EZ was advanced cautiously and could pass the narrow stenotic lesion. After then, Driver stent 4.0*18 mm was advanced gently deployed exactly. Post-dilation was performed with 4.0*18 mm stent balloon up to 16 atm. Finally, Dr. Kao removed 0.014 inch FilterWire EZ. Final vertebral angiogram showed the perfect result (Figure 2).



Figure 1

DES-ISR at LCX ostium; How about Treatment of Drug-Eluting Balloon?

Yesterday, Dr. Raj Makkar (Cedars-Sinai Medical Center, USA) and Chi-Kin Chan (United Christian Hospital, Hong Kong, China) treated drug eluting stent failure, i.e. in-stent restenosis (ISR). 7 month ago, 48 year-old man had got PCI on LMCA bifurcation disease with mini-Crush technique (Xience V stent 35*28 mm and 2.75*28 mm at LM-pLAD, Xience V stent 3.0*28 mm at pLCX) and proximal to mid RCA (Xience stent V 4.0*28 mm and Xience V 4.0*23 mm). He patient have no feel any symptom.

Electrocardiogram showed Q wave in anterior leads. And echocardiogram showed normal LV ejection fraction without regional wall motion abnormalities. However, follow-up of coronary angiogram showed tight in-stent restenosis at the LCX ostium (Figure 3). FFR showed that the lesion in LCX ostium was significant (0.52). The optimal treatment for the DES ISR still has been challenging. Dr. Makkar selected 8 Fr XB 3.5 guiding catheter to engage LMCA and inserted a 0.014 inch BMW wire into the LCX. Intravascular ultrasound was initially performed, showed that extensive tissue growing with tight stenosis at the ostial part of LCX stent (Figure 4). He got to inflate cutting balloon with 3.0*10 mm at 12 atm. Finally, SeQuent please 3.0*20 mm, was inflated at 7 atm over 30 seconds (Figure 3). The final result was excellent (Figure 5).



Figure 2



Figure 3

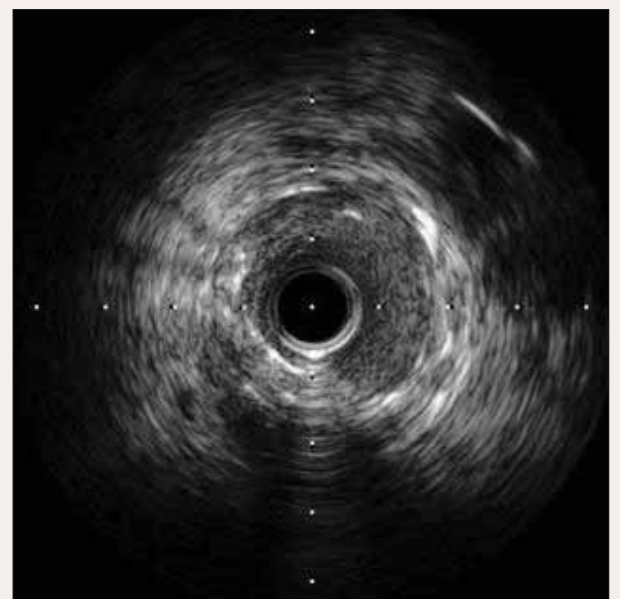


Figure 4



Figure 5

Techniques for CTO Intervention, 'Best Selection and Right Direction'

Breakfast Meeting, 7:00 AM - 8:10 AM

Retrograde PCI- When and How?

Nae Hee Lee, MD

Dr. Nae Hee Lee will present in depth review of retrograde CTO-PCI at breakfast session. He will say that the retrograde approach is now considered to be one of the most promising techniques to improve the success rate of PCI for CTO. This technique can be attempted firstly (primary approach) or after a failed antegrade approach (secondary approach). In one study (primary approach 58%, secondary approach 42%), the overall success rate of retrograde PCI was 71%. In the secondary approach, the retrograde PCI success rate was 90%, which means that this technique can save 90% of cases with prior failed antegrade approach. However, in the primary approach, the retrograde PCI success rate was 57%, and the antegrade approach saved 67% of cases with the failed retrograde approach. Therefore, in the case of the primary retrograde approach, strict case selection seems to be critical to avoid unnecessary efforts because this technique is more complex and more time-consuming, and has a higher likelihood of complications than the antegrade approach. The most common cause for failure of retrograde PCI was inability of the wire to cross the collateral pathway. Thus, selection of a suitable

collateral is very important. The septal collateral is less tortuous than the epicardial collateral and has a short length, which lead to more frequently use of the septal channel. The collateral size has been considered to be the most important factor for collateral passage. However, nowadays the channel tortuosity may more critically affect wire passage because recently developed channel dilator (Corsair catheter, Asahi Intec) can enlarge the collateral size. In case of the epicardial collateral, careful manipulation of the wire is required because injury to the epicardial collateral potentially can bring about serious complications such as a pericardial tamponade or extensive target vessel ischemia. Once the retrograde wire reaches the distal CTO site, 4 different kinds of techniques were used to cross the CTO. The retrograde wire crossing technique (retrograde wire was directly passed into a proximal true lumen), and the kissing wire technique (antegrade wire was passed into the distal true lumen under the guidance of the retrograde wire), are relatively simple and



generally firstly attempted methods. However, because of the long course with angulations over the retrograde pathway and the complex CTO anatomy, more complex techniques, such as the CART (making a connection between the subintimal space of the CTO and distal true lumen for wire passage in the antegrade direction) or the reverse CART technique (making a connection between the subintimal space of the CTO and the proximal true lumen for wire passage in

the retrograde direction), are required to increase the success rate in more than half of the cases. Since the Corsair catheter was introduced, which has the excellent

cross ability across the collateral or CTO site, the reverse CART is more frequently used than the CART technique.

Compared to the antegrade approach, the retrograde approach has an advantage for balloon or microcatheter passage because the presence of the antegrade and the retrograde wire in the same vessel makes it possible to perform special kinds of anchor-balloon techniques such as distal anchor-balloon technique or double anchor-balloon technique. The double

anchor-balloon technique can provide maximal penetration power for balloon passage by simultaneous application of the proximal anchor-balloon technique (second balloon was inflated in the proximal branch of collateral-donor artery) and the distal anchor-balloon technique (the passed retrograde wire was trapped by antegrade ballooning). The retrograde PCI does not seem to be a completely safe procedure, because unexpected collateral-donor artery complications, such as dissection or acute thrombosis, may occur. Such donor-vessel-related complications require early recognition and immediate treatment because life-threatening extensive ischemia can develop. Also, keeping the ACT level above 300 s by checking it every 30 min is very important since the prolonged procedure time and placement of the guiding catheter in the donor artery may increase the chance of thrombus formation. The retrograde approach is now considered to be an effective procedure in the treatment of complex CTO. However, due to the technical and perceived lesion complexities with the potential risk of unexpected complications, strict case selection, dedicated devices, and strict application of the basic principles of CTO-PCI are essential to ensure the success of this procedure.

Challenging and Evolving Percutaneous Treatment of Valvular Heart Disease and Congenital Heart Disease

Structural Heart Disease Symposium

Cardiac CT and Transcatheter Closure of ASD

Jin-Young Song, MD

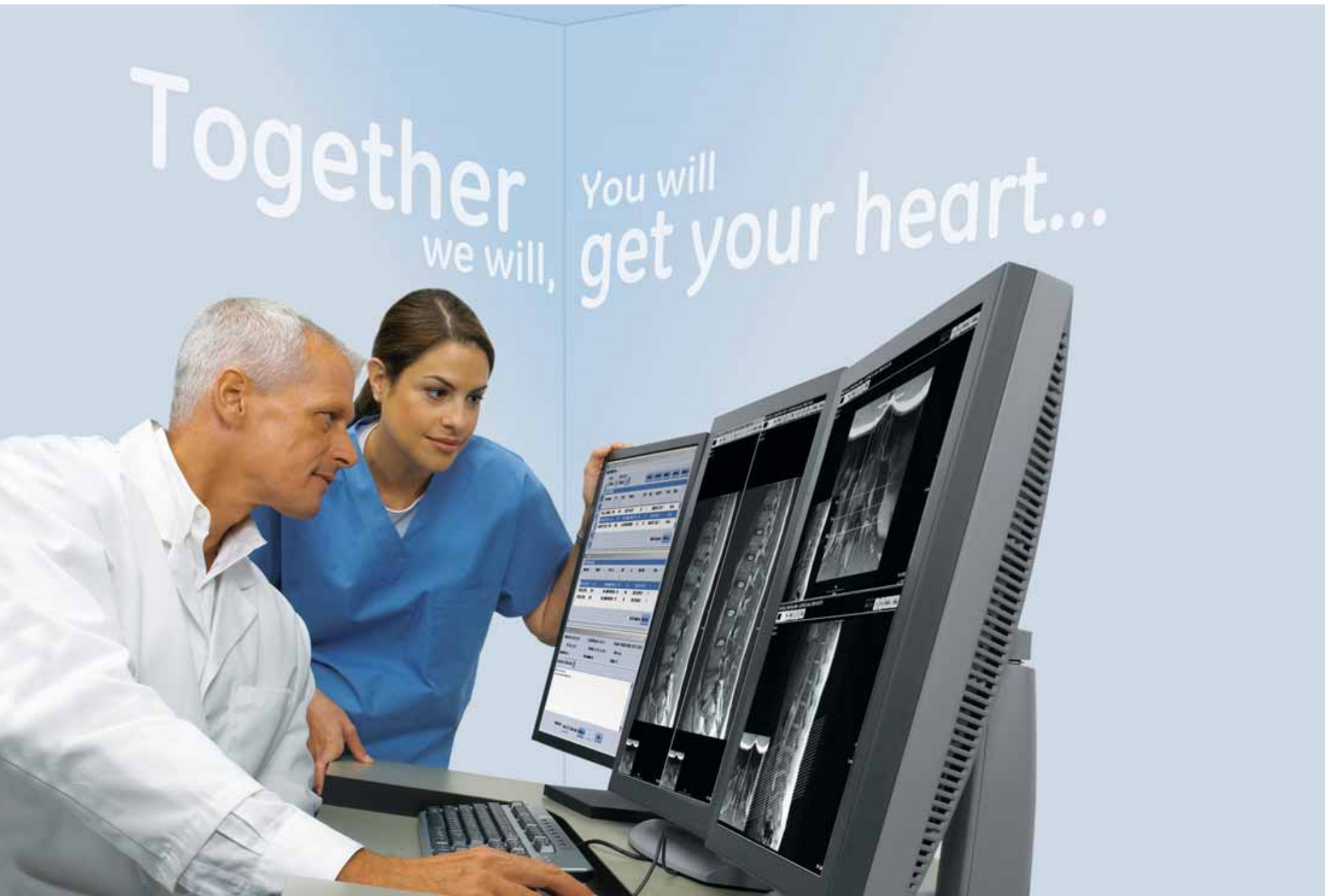
Nowadays, transcatheter closure of an atrial septal defect (ASD) with an Amplatzer septal occluder (AGA Medical, Golden Valley, MN) is a very popular and effective method. An accurate evaluation of the ASD is crucial however for successful transcatheter closure. In the evaluation that is done before the transcatheter device closure, we need to consider evaluate various factors: the shunt amount, the size of the defect, the location of the defect, the length of four rims, the number of defects, the relationship to the adjacent cardiac and vascular

structure, coexisting abnormalities, and existence of pulmonary hypertension.

Dr. Song presented the issue related cardiac CT and transcatheter closure of ASD yesterday. Transthoracic Echocardiography (TTE) is the primary tool for diagnosing ASD and transesophageal echocardiography (TEE) is the 'gold standard' method for completing the evaluation of a transcatheter closure. But now cardiac MRI and 3-dimensional echocardiogram are reported to be useful for these assessments. It is well known that TTE has limitations for in sizing and localizing the ASD because of the small field of view, the poor image in obese patients or emphysematous lung conditions, and poor subcostal images for

adults. Even though TEE can visualize the entire plane of the ASD, TEE is not adequate for the accurate measurement of the posterior inferior rim. Also, TEE is invasive and general anesthesia is necessary for pediatric patients. Cardiac MRI can measure the shunt amount with cardiac chamber enlargement and ventricular function, but it needs good breath holding and is a time consuming technique. Cardiac CT shows superb spatial and temporal resolution with a short scanning time. Also, ECG gating makes it a good tool for obtaining a morphologic image of the ASD. The capability of a three dimensional echocardiogram is comparable to that of cardiac CT. However, cardiac CT can evaluate abnormalities of

adjacent vascular structures simultaneously, such as, coronary arteries, lungs and airways. It is true that cardiac CT has the shortcoming of radiation exposure, but with the development of low kilovoltage scanners, weight-based tube current adjustment and use of systemic protection, the radiation dose can be minimized. Dr. Song said "We tried to use cardiac CT for sizing the ASD before transcatheter device closure. We selected the size of the ASD device with good results. Even though our sample size was small, cardiac CT seemed helpful for noninvasive evaluation of an Amplatzer septal occluder implantation for ASD closure."



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imagination at work

Angioplasty Summit 2011 KCTA Symposium (The 14th Annual Conference for Cardiovascular Nurse & Technologist)

Main Arena, Vista Hall, 12:30 PM - 4:05 PM

Be sure to stay for the afternoon session. After the close of Angioplasty Summit 2011, the 14th Annual Conference for Cardiovascular Nurses and Technologists organized by the Cardiovascular Technology Association (CTA) will be held on Friday, April 29. Enthusiastic technologists from all over the world will cover diverse topics from basics to essentials as well as interesting cases from the cardiovascular cath room. This should appeal to cardiovascular nurses and technicians of all skill levels. After the opening address of CTA Chairperson Jae Yoon Ko, the first session will be begin with the Featured lecture. The Course Director of Angioplasty Summit-TCT Asia Pacific 2011, Prof. Seung-Jung Park, will talk as the first speaker, about "Discrepancy between anatomic vs. functional parameters (IVUS

vs. FFR)." Next, Dr. Soo-Jin Kang will present "Tissue characterization of neointima by OCT, IVUS and VH". The second set of didactic lectures for this year's Conference for Nurses and Technologists will begin with the invited lecture from China & Japan. Mr. Jing Kan's "The Application of Computational Fluid Dynamics in Coronary Bifurcation" and will be followed by Mr. Yan Liu's "Stem Cell Transplantation in Acute Myocardial Infarction and Follow-Up Results.", Mr. Toshihiro Kobayashi The Use of Multislice Computed Tomography in Our Hospital and Mr. Masato Tsujii Skill Up: How to Read ECG Monitoring will be presented. In the third session, with subtitle "Current Practice at the Catheterization Laboratory", Mr. Eun-Kyung Park will present "Post PCI Exercise Program in Cardiac

Rehabilitation", followed by "Nursing Care in High Risk Patient for PCI" by Mrs. Kyung Ae Kim and "Research in Coronary Artery Diseases" by Hye-Jeon Jangw. Finally, enthusiastic nurses and technicians from South Korea and China will

complete this session with a competition in the imaging modalities IVUS, VH and OCT. Don't miss this year's Conference for cardiovascular nurses and technologists and learn much from it.



5th Cardiopulmonary Rehabilitation Workshop 2011

Tutorial Arena, 8:25 AM - 3:30 PM

The Walkerhill Hotel provides an excellent venue for informative presentations, personal and professional networking at the 2011 5th cardiac rehabilitation Conference in April.

Included in the Angioplasty Summit for 5 year consecutively, the cardiac rehabilitation workshop conference will open on Friday morning with a variety of speakers presenting on the latest physiological and practical exercise developments associated with cardiac rehabilitation. Three educational themes were delivered to an extremely high standard with interesting topics covered. As the first session named 'Webinar', Patient screening and enrollment by Dr. Richard A. Josephson will be presented, Customer-focused service delivery and measure for an exceptional program by Dr. Curt Meyer and "Getting paid for cardiac rehabilitation: What is the US model" by Dr. Karen Lui.

The second session will focus on health insurance issue related with Cardiac/pulmonary rehabilitation should be paid

in Korea? by Dr. Jong-Young Lee.

In last session, named "More about cardiac rehabilitation, Pathophysiology of COPD" will be presented Dr. Kwang-Ha You, Expected outcomes of pulmonary rehabilitation by Dr. Yong-Bum Park, "Core competencies for cardiac rehabilitation/secondary prevention professionals" by Dr. Larry F. Hamm and "University/Community model for primary prevention of CHD in the US" by Dr. Peter H. Brubaker. Especially, Larry F. Hamm will talking about comprehensive cardiac rehabilitation/secondary prevention programs (CR/SP) and General core competencies for health care include providing patient-centered care, working in interdisciplinary teams, employing evidence-based practice, applying quality improvement processes, and utilizing informatics. Each CR/SP core competency area includes specific knowledge and skills required for competence in that area. The following competency related to counseling patients about physical activity is an example of a specific CR/SP core competency. CR/SP

services are typically delivered by a multidisciplinary team of health care professionals. This team often includes professionals from some of the following professions: medicine, nursing, clinical exercise physiology, physical therapy, clinical nutrition, clinical psychology, and pharmacy. It is this multidisciplinary team that makes it reasonable to have such wide ranging set of core competencies. It would be extremely difficult for any one health care professional to possess all of the knowledge and skills for all 10 core competency areas. Rather, combining the knowledge and skills from the various disciplines represented on the multidisciplinary team makes this comprehensive list realistic. The core competencies also provide a standardized list of knowledge and skills that are specific to CR/SP programs and can be used for periodic assessment of the program staff. In addition, these competencies can assist academic programs so that they include the necessary knowledge and skills in the curricula designed to train

students to enter the field of CR/SP.

We definitely recommend the AMC rehabilitation workshop at the last day of Angioplasty Summit from 8:25 AM to 3:30 PM, complimentary for all Angioplasty Summit attendants. Take advantage of your free time and see the latest cardiac rehabilitation program. The valuable information and networking prospects make this an event not to be missed.

10 Core Competency Areas

- Patient assessment
- Nutritional counseling
- Weight management
- BP management
- Lipid management
- Diabetes management
- Tobacco cessation
- Psychosocial management
- P. A. counseling
- Exercise training evaluation

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Organizing Director
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- Hands-on Experience in Cath Lab
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- Visiting Professors' Activities - Case Presentation & Featured Lecture

| Lunchtime Activities

- Asan Medical Center Tour
- Dynamic Round Table Discussion
- Case Presentation & Discussion

| Evidence-Based Lectures

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

| Registration site & Contact

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16th Angioplasty Summit TCTAP 2011

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