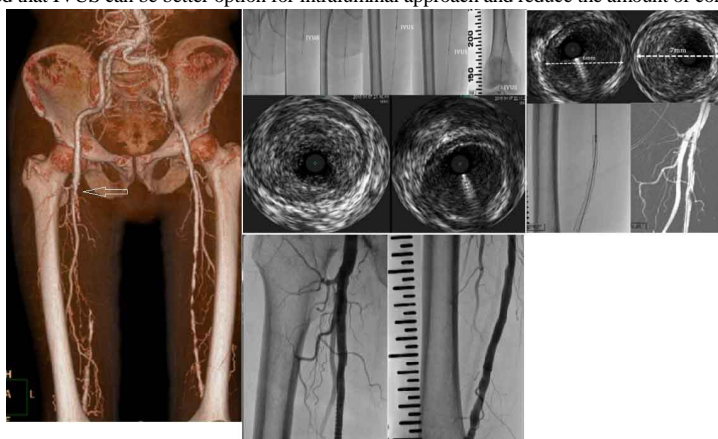## IVUS-guided Percutaneous Transluminal Angioplasty in Claudicant with Renal Insufficiency

순천향의대 천안병원 내과학교실

*양두혁, 박상호

The IVUS in peripheral intervention is useful for lesion characteristics and sizing, optimal selection of devices, confirmation of intraluminal approach, saving the amount of contrast-dye in CRI, and finding the origin in stumpless chronic total occlusion(CTO) lesion. We report the case that IVUS can reduce the amount of the use of contrast-dye and lower the incidence of AKI in the patient with chronic renal failure. A 47 year old man with heavy smoking history was admitted due to unhealed left foot wound with pain about 4 weeks ago. The creatinine level was elevated and creatinine clearance was below 35ml/min. Extremity angio CT showed the CTO of right superficial femoral artery. The precise measurement of the true luminal diameter, assessment of the calcific nature of the plaque, delineation of wall morphology, and the ability to carefully visualize the post-balloon result are required for successful percutaneous transluminal angioplasty (PTA). IVUS images not only present the luminal and adventitial surfaces of vessel segments, but discriminate between normal and diseased components. IVUS devices are also sensitive in differentiating calcified and noncalcified vascular lesions, which lead to correct sizing of PTA balloons based on IVUS imaging alone. Better result was confirmed, utilizing IVUS to delineate post-PTA dissections that were significant enough to require stents. Our case showed that IVUS can be better option for intraluminal approach and reduce the amount of contrast-dye.

Incidence of Tachyarrhythmia and its Impact on Twoyear ClinicalOutcomes in Patients with STelevation

서울 노원 을지병원

*이완섭, 박지영, 최재웅, 유승기, 박성훈

Background/Aims: Tachyarrhythmias such as serious atrial and ventricular arrhythmias could occur during percutaneous coronary interventions (PCI) in patients (pts) with ST elevation myocardial infarction (STEMI). However, there were limited data regarding the incidence of tachyarrhythmias and its impact on the long term clinical outcomes in STEMI pts undergoing PCI with drug-eluting stents (DESs). **Methods:** This study consisted of 2224 consecutive pts underwent PCI from November 2005 to June 2008. Among them, 434 consecutive STEMI pts underwent PCI with DESs were enrolled for the analysis. The angiographic and major clinical outcomes of pts with tachyarrhythmia (n= 32pts, 7.4%) were compared with those of Control group (n= 402 pts, 92.6%) up to 2 years. **Results:** The STEMI group showed higher incidence of sustained ventricular tachycardia (VT), non-sustained VT, ventricular fibrillation (VF) and atrial fibrillation (AF) compared with those of other two groups (Table 1). The baseline clinical and procedural characteristics were similar between pts with tachyarrhythmia and those of control group. Six-month angiographic and cumulative clinical outcomes up to 2 years were similar between the two groups except pts with tachyarrhythmia showed higher incidence of cardiac death within 1 month compared with control group but not at 6 to 24 months (Table 2). Tachyarrhythmia itself was not an independent predictor of cardiac death (Adjusted OR: 1.711, 95% CI: 0.443-6.616, p-value=0.436) within 1 month **Conclusions:** In our study, the incidence of tachyarrhythmia was higher in STEMI pts and was associated with higher incidence of cardiac death within 1 month. However, development of tachyarrhythmia was not an adverse indicator for worse clinical outcomes in STEMI pts undergoing PCI with DESs.