

but not indicated for reversible disorder. The purpose of this study was to evaluate the recurrence rates of ventricular fibrillation (VF) in patients with VSA. **Methods and Results** We assessed ICD therapy during follow up period (52.5 months) in a group of 14 patients (12 male, 48±15 year-old) who were diagnosed with VSA and who received ICDs for secondary prevention after an episode of resuscitated sudden cardiac death due to VF. Two of 14 patients (14%) have experienced an appropriate shock during follow-up period even under optimal medical therapy. Incidence of appropriate shock after first episode of VF Raged between 5 and 12 months. Three inappropriate shocks have occurred. All 14 patients were alive and were symptom-free during the study. **Conclusions** ICDs for secondary prevention might be considered in patients with VSA because the recurrence of VF was relatively high and occurred early period after sudden cardiac death.

### P3-47.

#### **Relationship between tissue characterization of coronary plaques observed by Integrated back-scatter intravascular ultrasound (IB-IVUS) and Fractional Flow Reserve after PCI in Patients with stable coronary heart disease**

(循環器内科)

○小川 雅史、山下 淳、山科 章

(八王子：循環器内科)

田中 信大、迫田 邦裕、外間 洋平

(戸田中央総合病院：循環器内科)

木村 揚

**Back ground** : Fractional Flow Reserve (FFR) is an index of functional coronary stenosis. Several studies have suggested that FFR-based PCI results in an excellent long-term outcome, but we sometimes have experienced an insufficient improvement of FFR after PCI. We assessed the relation between tissue characterization of plaques evaluated by IB-IVUS and an insufficient improvement of FFR after PCI of left anterior descending coronary artery (LAD). **Method** : Twenty six patients with stable angina pectoris who received PCI for LAD were enrolled in this study (67.0±10.0 years

old, 20 males ). IB-IVUS was evaluated from LAD distal to LCA orifice before PCI. Using Image-analysis software (VISIWAVE), plaque volume and tissue characterization (calcification (CA), dense fibrosis (DF), fibrosis (F), and lipid pool (LP)) were assessed in whole of LAD. FFR was evaluated in LAD distal using pressure wire after PCI.

**Results** : Plaque volume before PCI was 60.6±11.5 mm<sup>3</sup>/10 mm. FFR after PCI was 0.80±0.06. There was no significant relation between plaque volume and FFR after PCI. In the analysis of plaque tissue characterization, there were significant correlation of FFR after PCI with CA (%) ( $r = -0.579, p = 0.015$ ) and DF (%) ( $r = -0.542, p = 0.036$ ). **Conclusion** : Our findings indicate that the amount of calcification and dense fibrosis of coronary plaques may relate with an insufficient improvement of FFR after PCI.

### P3-48.

#### **Possibility for Early Discharge after trans-catheter aortic valve implantation (TAVI) in Japanese Patients**

(社会人大学院博士課程 4年循環器内科学)

○小松 一貴

**Background** : In western countries, post trans-catheter aortic valve implantation (TAVI) early discharge program including same day and next day discharge has been started. However, risk for complications is higher in Japanese patients. Thus, patient selection is very important for safety discharge

**Methods** : 42 patients who undertook TAVI were included in the study. Patients were divided into 2 groups : possible early discharge (ED) group and standard group. Possible ED was defined as condition patients discharged without complication, intravascular medication and mechanical support. Odds ratio (OR) and 95% confidence interval (CI) of ED in patient backgrounds, measurements including pre-procedural blood test and echocardiogram and procedure contents were calculated by multivariate step wise logistic regression analysis including all parameters.

**Results** : 24 and 18 patients were included in ED and