we divided the whole plaques into two groups: the ruptured/non-ruptured plaque group. We analysed the similarities and differences between the two groups by VH-IVUS.

Results Sixty four patients were enrolled, four patients were excluded. Eventually we enrolled 60 patients. There were 108 sick vessels in total. The incidence of two or more ruptured plaque and two or more VH-TCFA were 13.9% and 54.6% respectively. 84% of the ruptured plaques and 86% of the VH-TCFA were located in the first 40 mm segments proximal to the coronary ostium. There were no significant difference in the incidence of two or more ruptured plaque (86.7% vs 87.5%, p=0.898) and two or more VH-TCFA (60% vs 47.9%, p=0.210) between the target/non-target vessel group; The ratio of the area of NC (32±12% vs 27±10%, p=0.033) and the ratio of the volume of NC (25±9% vs 22±8%, p=0.03) were much higher in the target lesion group than in the non-target lesion group; The ratio of the area of NC (42±6% vs 27±10%, p=0.000), the ratio of the volume of NC (32±9% vs 22±8%, p=0.000) were much higher in the ruptured plaque group than in the non-ruptured plaque group.

Conclusion It was common that there were two or more ruptured plaques and VH-TCFA in ACS patients. There were no disparity in the incidence of the ruptured plaque and VH-TCFA between the target vessel and the non-target vessel; The ruptured plaque and the VH-TCFA demonstrated cluster-distribution tendency, the first 40 mm segment proximal to the ostium of the coronary artery were dangerous location; The content and/or the ratio of NC were related to the stability of the plaque, however, MLA and PB maybe had nothing to do with the stability of the plaque; Plaques that have larger NC were more common in the ruptured plaques.

Coronary heart disease

[gw22-e0031] COMPARATIVE ANALYSIS BETWEEN TARGET LESION AND NON-TARGET LESION OF ACS PATIENTS BY VH–IVUS

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Purpose Through assessing the similarities and differences between target lesion/ruptured plaque and non-target lesion/non-ruptured plaque in ACS patients by VH-IVUS, we aimed to explore the reason why the target lesion become the target.

Methods We enrolled 64 patients with ACS in Cardiac Department of Tungwah Hospital from December 2009 to December 2010, who agreed to undergo CAG and VH-IVUS examination. We excluded patients who had cardiac shock, history of stroke, PCI/CABG, serious hepatic and nephritic dis-function, CTO lesions, anguled or curved lesions, etc, which made it impossible for catheter to get though. We operated the CAG and IVUS examination in the whole sick coronary arteries. According to ECG, we divide the whole coronary arteries into two groups: the target/non-target vessel group. We analyse the similarities and differences between the two groups by IVUS; According to ECG and CAG, we divided the whole lesions into two groups: the target/non-target lesion group. We analysed the similarities and differences between the two groups by VH-IVUS; We selected the ruptured plaques, then