HOW SAFE IS THE ‘FULL-METAL JACKET’ FOR LONG DIFFUSE CORONARY LESIONS? INSIGHTS FROM A VERY LONG-TERM FOLLOW-UP

S B Basavarajiah,1 N T Naganuma,2 T H Hasagawa,2 A L Latib,2 A R Reza,2 K T Takagi,3 A S Sharpe,3 F F Figini,2 A C Colombo2
1Imperial College; 2EMO-GVM Centro Cuore Columbus; 3Royal Devon & Exeter Hospital
doi:10.1136/heartjnl-2013-304019.61

Introduction Percutaneous intervention (PCI) in very long diffuse lesions in native coronary arteries can potentially result in multiple overlapping stents and may lead to ‘full-metal-jacket’ (FMJ). There is limited data on the very long-term follow-up of patients with FMJ and would be useful in understanding the safety and feasibility of such a strategy. We would like to address this issue from our large cohort of patients.

Methods Between April 2002 and March 2007, 274-patients (297-long diffuse lesions in native coronary arteries) underwent PCI utilising drug-eluting stents (DES). FMJ was described as lesions requiring ≥60 mm of continuous stent. The measured endpoints were cardiac death, target-vessel myocardial infarction (MI), target lesion vascularisation (TLR), target vessel vascularisation (TVR) and major adverse cardiac events (MACE) defined as composite of cardiac death, target-vessel MI and TVR.

Results The mean age of patients were 62.1±11 years and 257 (94%) were male. Eighty-two patients (30%) were diabetic. The mean length of total stents used was 75.1±16.4 mm (60–150). Seventy-three patients (26.7%) were diabetic and mean ejection fraction of the cohort was 52.2±10%. The lesion was a chronic total occlusion in 33% (n=98). Intra-vascular ultrasound was utilised during PCI in 106 (38%) lesions. During the median follow-up of 74.7-months (IQR 58–96), the rates of cardiac death, MI, TLR and TVR were: 5.8% (n=16), 6.2% (n=17), 27.3% (n=81) and 30% (n=89) respectively. The MACE rate was 34%. Definite and probable stent thrombosis (ST) occurred in 10-patients (3.6%), of which, 2 were acute ST, 4 were late ST and 4 were very late ST. Six of the 8-patients with ST were on dual anti-platelet agents at the time of event. Two patients with late ST had their DAPT stopped prematurely.

Conclusions The long-term follow-up of patients with FMJ is acceptable especially in regards to hard endpoints (death and MI) given the complexity of lesions treated. The high MACE rate was driven mainly by TVR. The availability of newer-generation DES may improve these results.