

Frequency of unexpected non-cardiac surgery and subsequent adverse events after drug eluting stent implantation for acute myocardial infarction

¹Handa City Hospital

Shogo Yamaguchi¹, Akihito Tanaka¹, Koji Okada¹, Yasushi Jinno¹, Tadahiro Ito¹, Naoki Iwakawa¹, Shinsuke Takeuchi¹, Masaki Sakakibara¹

Background: Dual anti-platelet therapy is required to be continued at least one year following drug eluting stent (DES) implantation and it is therefore important to understand the need for non-cardiac surgery prior to stent implantation. The frequency of unexpected non-cardiac surgery for acute myocardial infarction (AMI) patients is expected to be higher than elective cases, given the extremely shorter time to consider the indication. However little is known about the frequency and the subsequent adverse events. **Methods:** In 371 AMI patients undergoing primary stenting between July, 2006 and June, 2011, DES was implanted in 282 patients. Two hundred and forty-four patients with one year follow-up were enrolled. We investigated the non-cardiac surgery which required discontinuation of dual anti-platelet therapy within one year after primary stenting, and subsequent adverse events. **Results:** Mean age was 66 ± 12 years and 196 patients were male. Non-cardiac surgery which required discontinuation of dual anti-platelet therapy was performed in 12 patients (4.9%) within one year after primary stenting. One of the 12 patients suffered a major cardiac event (acute myocardial infarction) during discontinuation of dual antiplatelet therapy in the peri-operative period. Four of 12 operations were performed despite being postponable to at least one year after primary stenting. **Conclusion:** Unexpected non-cardiac surgery within one year after DES placement for AMI patients might be relatively common. The indication of DES for emergency cases should be considered carefully. Additionally, it would be necessary for cardiologists to educate physicians in different fields more strictly in the era of DES.