

“Full metal jacket” (stented length \geq 50 mm) using drug-eluting stents for chronic total occlusive lesions.

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Aims: Limited data exists on patients who have undergone drug eluting stent (DES) implantation of long chronic total occlusive (CTO) lesion. So we investigated that in this study. **Methods and result:** This was a single center non-randomized retrospective study. We defined long continuous stent implantation (stent length \geq 50 mm) as “full metal jacket” (FMJ). From April 2007 to March 2013, 345 consecutive patients (355 lesions) who underwent FMJ using any DESs for de novo lesion were enrolled. Subjects were classified into two groups: the patients with CTO lesion (CTO group, 111 patients, 113 lesions) and without CTO lesion (non-CTO group, 234 patients, 242 lesions). The two groups were compared for median 30 months (interquartile range, 18 to 50) clinical outcomes. Endpoints were freedom from target lesion revascularization (TLR) and major adverse cardiovascular events (MACE) at 3 years after stent implantation. Patients background were almost similar between two groups. The mean total length of implanted stents was longer in CTO group (73.1 \pm 19.6 mm vs. 60.4 \pm 11.4 mm, $p < 0.05$). Regarding the clinical outcomes, there were no significant differences in the rate of freedom from TLR (84.0% vs. 82.0%, Log rank $p = 0.98$) and MACE (77.1% vs. 76.9%, Log rank $p = 0.86$) at 3 years estimated using the Kaplan-Meier methods compared to non-CTO group. **Conclusion:** The strategy of FMJ using DES was acceptable for CTO lesions.