Factors of Restenosis After Endovascular Treatment for Iliac Artery

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Background: The factors associated with restenosis after endovascular treatment (EVT) for iliac artery lesions in peripheral arterial disease (PAD) were not established. The aim of this study was to investigate the predictors of restenosis after EVT for iliac artery lesions.

Methods: The REAL-AI (REspective multicenter Analysis of primary stenting for AortoIliac artery disease) registry was performed as a multicenter registry enrolling consecutive patients undergoing primary stenting for de novo lesion. From January 2005 to December 2009, a total of 2096 patients (2601 lesions, age: 71.3±7.5 years, mean follow interval 31.1±15 months, claudication: 82.2%) were enrolled. Univariate and multivariate analysis were performed to estimate the predictors of restenosis after EVT for iliac artery.

Results: EVT was performed for 2601 lesions (TransAtlantic Inter-Society Consensus-II (TASC-II) Type-A: 1201, B: 694, C: 311, D: 395) in PAD patients. The mean lesion length was 53±31 mm. Restenosis rate was 14.1% (368 lesions), primary patency was 92.5% at 1 year. The mean term of restenosis from procedure was 810±354.8 days. Results of multivariate analysis were shown in the table. Conclusions: We found stent fracture, low out flow and non-use of aspirin to be predictors associated with restenosis after EVT for iliac artery.

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Efficacy of the Novel Ultrasonography “Vascular Elastography” Guided Endovascular Therapy

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Background: The success rate of endovascular therapy (EVT) for chronic total occlusion (CTO) of femoropopliteal arteries has improved because of devices development and the introduction of the echo guided EVT from body surface. But now this is still challenging.

Elastography is a new ultrasonographic method that has been examined as a diagnostic tool for breast lesions. We applied this method to hardness measurement of CTO lesions and can avoid the use of stents in his complex anatomic region.

Conclusions: These independent core laboratory confirmed results show that atherectomy is highly effective in the treatment of atherosclerotic lesions of the popliteal artery and can avoid the use of stents in his complex anatomic region.