Primary patency rates of different Trans-Atlantic Inter-Society (TASC) subtype in patients with aortoiliac occlusive disease

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Objectives
To report our 2 years follow up experience in this field and Technical success rate and primary patency rate were the main outcome measures.

- A retrospective review of patients underwent aortoiliac angioplasty from September 2013 to March 2015 was conducted.
- Following data were recorded in all cases: age, sex, comorbidities, pre-procedure symptoms, previous drug history, smoking habit, technical success rate in endovascular treatment, hospital stay and post-operative complication.
- A 0.035-inch hydrophilic guide wire (Terumo Guidewire, Somerset, New Jersey, US) was used to pass occlusion and stenosis. Standard angioplasty balloons (Sleek OTW, Cordis, Johnson & Johnson, US) matching the length of the lesion and diameter of the artery was used. Self-expandable bare stent was used in 45(77.6%) lesions and balloon expandable stent was used in 19(32.8%) lesions
- Follow up visit had been set up at 2 weeks after procedure, then in every 3 months for the first year then each 6 months for the second year. In each visits, improvement and clinical status, distal pulse to angioplasty site, patient’s history and duplex ultrasound examination was assessed. If patients reported recurrent symptoms in history accompanied with recurrent stenosis > 50% detected by duplex scan, they were candidate for repeat intervention.

-Bias: We tried our best to follow whom ever were treated in our center but in some cases patients were missed or died. During the follow up period, 9 patients died and 11 patients were missed to follow though we tried several times to contact and invite them for follow up visits. The follow up rate was 75%. Thus excluding these patients may have lead us to overestimate primary patency rate.

-Kaplan-Meier analysis was used to assess survival (SPSS version 22, SPSS, Inc., Chicago, IL).

Results
58 patients (m:f=53:5) with mean age of 64.28 ± 10.88 years and most common initial presentation of intermittent claudication (37.9%) were evaluated. Technical success rate was 100% in each TASC subtypes. The mean time of hospital stay was 9.45 ± 7.96 days. The mean follow up period was 14.01±5.87 months (6-27 months). Based on TASC II morphological stratification, 27, 4, 5 and 22 patients were in group A, B, C, D, respectively. The Kaplan-Meier analysis estimated primary patency rate of TASC subtypes A-D at 1 to be 96.3%, 100%, 66.7%, and 96.3%, respectively. 2 years primary patency rates were 96.3%, 100%, 66.7% and 81.6% for A-D TASC subtypes, respectively. There was no complication or death in study group.

Conclusion
Endovascular treatment for different TASC II subtypes is associated with considerable technical success rate and primary patency rate even in TASC D which has been previously indicated to be treated with open surgical procedures.