Clinical impact of "Aneurysmal Degeneration" after ELUVIA DES implantation

Tomofumi Tsukizawa, MD
Kishiwada Tokushukai Hospital
Kishiwada, Osaka, Japan
Disclosure

Speaker name: Tomofumi Tsukizawa

.................................................................

I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
Excellent patency rate of ELUVIA DES

Latest fluoropolymer-based drug-eluting stents (FP-DES) showed acceptable patency outcomes in the real-world clinical situation.


Malignant or not?
Halo and Aneurysmal degeneration (AD) after ELUVIA implantation

Bisdas T, et al. JACC Cardiovasc Interv 2018

Iida O, et al. JACC Cardiovasc Interv 2022
New Imaging modality
Optical Frequency Domain Imaging (OFDI)

10x higher resolution

Intima
Media
Adventitia

Lumen
Black Band

OFDI
IVUS
EEM
80s years old, gentleman
Left foot pain (Rutherford 4)
1.5 years later
Risk factors of AD

Risk factors of Aneurysmal Degeneration

* Use of IVUS
* Subintimal wire passage

Iida O, et al. JACC Cardiovasc Interv. 2022
Tsujimura T, et al. JACC Cardiovasc Interv. 2022
2.5 years later
3 years later
## Risk factors of restenosis at 1 year

<table>
<thead>
<tr>
<th>Risk factors of Restenosis at 1Y</th>
<th>Adjusted Odds Ratio (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemodialysis</td>
<td>1.71 (1.10-2.65), p = 0.018</td>
<td></td>
</tr>
<tr>
<td>CLTI</td>
<td>2.12 (1.33-3.38, p = 0.002</td>
<td></td>
</tr>
<tr>
<td>History of revascularization</td>
<td>2.03 (1.28-3.23), p = 0.003</td>
<td></td>
</tr>
<tr>
<td>Smaller Reference Vessel Diameter</td>
<td>0.75 (0.58-0.96), p = 0.024</td>
<td></td>
</tr>
<tr>
<td>Chronic total occlusion</td>
<td>1.87 (1.19-2.92), p = 0.006</td>
<td></td>
</tr>
<tr>
<td>Spot stenting</td>
<td>2.44 (1.54-3.86), p &lt; 0.001</td>
<td></td>
</tr>
</tbody>
</table>

**Aneurysmal Degeneration** was not associated with 1-year restenosis

*Iida O, et al. JACC Cardiovasc Interv. 2022*
Spontaneous Aneurysmal Degeneration Healing After Fluoropolymer-Based Drug-Eluting Stent Placement Observed Using Optical Frequency Domain Imaging

Tomofumi Tsukizawa, MD; Masahiko Fujihara, MD; Yuko Yazu; Tasuku Kozasa, MD; Kenichi Fujii, MD

An 80-year-old man with intermittent claudication underwent implantation of a fluoropolymer-based drug-eluting stent (FP-DES) (Bionic, Boston Scientific, Marlborough, MA, USA) for treatment of an occlusion. Angiography revealed recurrence of restenosis, and atheroembolic disease (AD) was diagnosed via contrast fluoroscopy and optical frequency domain imaging (OFDI). Angiography was conducted again 3 months later due to recurrence of symptoms, but showed AD disappearance. However, inadequate stent coverage remained on OFDI. Finally, angiography and OFDI confirmed AD disappearance and adequate stent coverage after 37 months (Figure). During this period, after continuing dual antiplatelet therapy for 9 months, the patient remained asymptomatic.
CONCLUSION

• The clinical course of Aneurysmal Degeneration is still unknown enough, but there are cases of spontaneous healing, so it may not necessarily be harmful.
Clinical impact of "Aneurysmal Degeneration" after ELUVIA DES implantation

Tomofumi Tsukizawa, MD
Kishiwada Tokushukai Hospital
Kishiwada, Osaka, Japan