Challenging cases and complications

「Ultrasonography guided wiring for SFA CTO lesions」

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Disclosure

Speaker name: Keisuke Hirano

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
Case presentation of echo guided wiring for SFA CTO
1. Puncture to lesion cross time: 16 minutes
2. Fluoroscopy time: 6 minutes
3. Distal puncture rate at last year: 8/176 (5%)
「Ultrasonography guided wiring method for SFA CTO」
**Ultrasonography long axis view**

- Wire
- Intima
- Adventitia

**Ultrasonography short axis view**

- Wire
- Intima
- Adventitia
Guidewire penetrated time

N group

58.1±38.8
Median 51
(min 3, max 157) [min]

P=0.04

O group

71.3±47.5
Median 66.5
(min 6, max 205) [min]

Mean±SD
Median(min, max)
Radiation and Contrast media

<table>
<thead>
<tr>
<th>Group</th>
<th>Dose of radiation [mGy]</th>
<th>Time of radiation [min]</th>
<th>Dose of contrast media [ml]</th>
</tr>
</thead>
<tbody>
<tr>
<td>N group</td>
<td>213.5±179.5</td>
<td>44.7±29.1</td>
<td>143.8±62.8</td>
</tr>
<tr>
<td></td>
<td>164.9(46.7, 880.9)</td>
<td>36(13, 134)</td>
<td>150(0, 400)</td>
</tr>
<tr>
<td>O group</td>
<td>375.4±216.9</td>
<td>49.4±29.9</td>
<td>197.0±85.1</td>
</tr>
<tr>
<td></td>
<td>213.1(28.3, 1391.7)</td>
<td>42(13, 170)</td>
<td>175(50, 430)</td>
</tr>
<tr>
<td>P value</td>
<td>0.04</td>
<td>ns</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>
Advantage of Echo guided wiring

1. Echo guided wiring is a safe procedure.
2. It leads to a decrease of Radiation dosage as well as shortening the Fluoroscopy time.
3. It is easy to get the true lumen.
4. It enables us to perform the true lumen angioplasty.
5. We cannot use Debulking device without the technique of true lumen angioplasty when it is released.
6. The DCB effect to the pseudo lumen angioplasty is not yet known.

Drawbacks of Echo guided wiring.

1. Sonographer is vital to perform Echo guided wiring.
   → Sonographer is not necessarily required.
   → Because Doctor can do the same procedure.

2. We cannot detect the high quality image without Hi-end machine.
   → There is no other way but to purchase the machine.
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