SFA lesions: Guidewire selection

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Disclosure slide

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☑️ I have the following potential conflicts of interest to report:

- Consulting: Medtronic, Spectranetics, Biotronik, Abbott, BD/Bard iVascular, Bentley, Cook, GE Healthcare, Terumo, Boston Scientific, Contego Medical, B Braun
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

☒ I do not have any potential conflict of interest
Why is the guide wire essential?

- **Access** lesions
- **Cross** lesions in 100% of the procedures
- **Deliver** devices

- An **appropriate guide wire selection** makes it easier to overcome difficult clinical situations
The PRINCIPLE of guidewire technology...

- Tip durability
- Pushability
- Steerability/torquability
- Trackability/support
- Tactile feedback
- Prolapse tendency
- Penetration power

- Vessel anatomy
  (tortuositites, acute angles, straight run-off...)

- Lesion location

- Lesion type (CTO, Ca, stenosis,...)
SFA ≠ Coronaries

CREATE ORDER IN THE CHAOS
Create order in chaos...

- **Frontline cases**
  - Easy, straight forward lesions
  - Stenoses, fresh thrombus

ABSOLUTELY STAY INTRALUMINAL
AVOID DISSECTIONS

↓

SLIDING WIRES
Create order in chaos...

- **Complex cases**
  - (long) CTO’s, different Ca+ levels

**TRY TO STAY INTRALUMINAL**
- Proximal cap penetration
- Following microchannels
- Delivery of devices

**SUBINTIMAL RECANALIZATION**
- Re-entry difficulties

**PENETRATING WIRES**
- DRILLING WIRES
- CTO WIRES

**DURABLE WIRES**
Create order in chaos...

• Which platform?
  • 0.035” : sometimes too aggressive, big loops, big dissections, big profiles

• 0.018”
  - sufficient support and power
  - lower profile
  - more and more SFA device compatibilities
  - suitable for popliteal and (proximal) BTK
  - Smaller loops, closer to the original lumen

• 0.014” : lack of support, lack of penetration power, less SFA-device compatibility
Frontline cases, 0.018” platform

- Sliding wires

![Graph showing comparison of tip load and rigidity](image)

- High support wire
- Short Spring Coil
Frontline cases, 0.018” platform

- Sliding wires of the 21st century

**ASAHI Gladius 0.018**

- Empty
- Nothing Protecting Core
- Only Core Wire Torqueing
- ROPE COIL
  - ACT ONE
- Protect Core From Kinking
- Increases Torque Force
Frontline cases, 0.018” platform

- Sliding wires of the 21st century

*ASAHI Gladius 0.018*

- Flat Core
  - Flat so whip motion occurs
- Round Core
  - Better Torque Response
  - No Whip Motion
Frontline cases, 0.018” platform

- Case exemple
Create order in chaos...

• Complex cases
  ✓ (long) CTO’s, low to moderate Ca+ levels

TRY TO STAY INTRALUMINAL

✓ Proximal cap penetration/microchannels
  - increasing support (catheter, wire,...)
  - increasing penetration power
  - changing friction characteristic: hydrophobic?
  - correct spinning/drilling
Create order in chaos...

- Mini pre-shape
- Mini pre-shape 1mm
- More Support

Hydrophilic Coating on Spring Co

Tip Load 12.0 gf

Micro-cone Tip

<table>
<thead>
<tr>
<th></th>
<th>ASAHI Halberd 0.018</th>
<th>Treasure 12</th>
<th>Competitor A</th>
<th>Competitor B</th>
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<tbody>
<tr>
<td>Distance</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>18.0</td>
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</table>
Complex cases: staying intraluminal — proximal cap/microchannels
Complex cases: staying intraluminal – proximal cap/microchannels
Create order in chaos...

- **Complex cases**
  - (long) CTO’s, low to moderate Ca+ levels

**SUBINTIMAL**
- Loop “Bolia” technique
- LP wires, smaller loop, closer to lumen, smaller dissections
- Spinning loop
- Durable wires
Complex cases: subintimal – looping technique/ spinning loop
Create order in chaos...

• Complex cases
✓ (long) CTO’s, severe Ca+

Astato 30

Hydrophilic Coating on Spring Coil (1)

Tip Load 30.0 gf

Gram/πr²

Astato 30

30 g
Complex cases: severe CA++/tight occlusion passage

ASTATO 30

Fast spinning
Complex cases: severe CA++/tight occlusion passage

ASTATO 30
Complex cases: severe CA++/tight occlusion passage

Astato 30
Penetration Technique

15 cm

Less support
Long Spring Coil

high support
Short Spring Coil
Summary

- Stenosis
- Thrombotic lesion
- Fibrotic lesion
- Calcific lesion
- Highly Calcific lesion

ASAHI GLADIUS 0.018"

ASAHI HALBERD 0.018"

ASAHI ASTATO 0.018"
Summary

• Choosing the right wire is thé key to a successful procedure
• Navigating, drilling, penetrating & supporting are the most important requirements
• 0.018” platform is my favourite platform for ATK work nowadays
• 0.018” peripheral ASAHI wires with their specific properties like wire rope structure, round core, unique coatings, microcone tips and Act-one technology make them very suitable for all ATK-work
• Gladius for frontline cases, Halberd for fibrotic and calcified lesions & Astato for the extreme lesions are the essential Asahi GWs of my personal treatment armamentarium
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