Selecting the right wire for the right case

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Disclosure slide

Speaker name: Koen Deloose, MD

- I have the following potential conflicts of interest to report:
  - Consulting: Abbott, Asahi, Biotronik, Boston Scientific, CTI vascular, CyndRX, GE Healthcare, Gore, iVascular, Terumo
  - Stockholder of a healthcare company
  - Employment in industry
  - Owner of a healthcare company
  - Other(s)

- I do not have any potential conflict of interest
3 types of BTK cases

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

ABSOLUTELY STAY INTRALUMINAL
AVOID DISSECTIONS

SLIDING WIRES

• **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

PENDRATING WIRES
DRILLING WIRES
CTO WIRES

DISSECTING WIRES

ID3 Medical – 2021
SLIDING WIRES

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

ABSOLUTELY STAY INTRALUMINAL
AVOID DISSECTIONS

SLIDING WIRES

SPECIFICATIONS
ASAHI Gladius 0.014”

- TIP LOAD: 3.0gf
- COIL MATERIAL: Stainless Steel
- CORE: ACT ONE
- WIRE OD: 0.014” (0.36mm)

- 50cm Hydrophilic Coating
- 11cm Spring Coil
- 40cm Polymer Jacket Cover

Polymer Jacket = gel-like & smooth (Lubricious)

Tracks / slides through tortuous vessels and heavily calcified lesions / micro-channels – reduces friction.

Coated with SLIP-COAT coating.
SLIDING WIRES

Asahi Gladius 14, 300cm

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

ABSOLUTELY STAY INTRALUMINAL
AVOID DISSECTIONS

SLIDING WIRES

With the courtesy of O Iida
SLIDING WIRES

Regalia® XS 1.0

- Tip Load: 1.0gf
- Coil Material: Stainless Steel
- Core Wire: One piece
- Wire OD: 0.014" (0.35mm)

Dedicated wire for delicate retrograde accesses, sliding BTA work, navigating into pedal arch, metatarsal arteries etc...

Polymer Jacket = gel-like & smooth (Lubricious)

Tracks / slides through tortuous vessels and heavily calcified lesions / micro-channels – reduces friction.
# PENETRATING - DRILLING - CTO WIRES

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td><strong>ASAHI Halberd 0.014”</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tip Load</strong></td>
<td>12.0gf</td>
</tr>
<tr>
<td><strong>Coil Material</strong></td>
<td>Stainless Steel</td>
</tr>
<tr>
<td><strong>Core</strong></td>
<td>ACT ONE</td>
</tr>
<tr>
<td><strong>Wire OD</strong></td>
<td>0.014” (0.36mm)</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td>None</td>
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</table>

- **Uncoated Tip**: 3.3cm Hydrophilic Coating
- **Radiopacity**: 5cm Spring Coil
- **Micro-cone Tip**
- **5cm Spring Coil**

## Complex Cases

- (long) CTO’s, different Ca+ levels
- Try to stay intraluminal
- Proximal cap penetration
- Following microchannels
- Delivery of devices

## Key Points

- Better Torque Response
- No Whip Motion
- Protect Core From Kinking
- Increases Torque Force

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PENETRATING - DRILLING - CTO WIRES

Asahi Halberd 14
# PENETRATING - DRILLING - CTO WIRES

## Specifications

<table>
<thead>
<tr>
<th>Astato XS 20</th>
<th>Astato XS 40</th>
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<tbody>
<tr>
<td>Tip Load 20.0gf</td>
<td>Tip Load 40.0gf</td>
</tr>
<tr>
<td>Coil Material: Stainless Steel</td>
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<tr>
<td>Core: One piece core wire</td>
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<tr>
<td>Wire OD 0.014” (0.35mm)</td>
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<tr>
<td>Cover: None</td>
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### Tapered tip with uncoated ball

- Provides excellent penetration

![Diagram showing Astato XS 20 and Astato XS 40 wires with specifications and features]
PENETRATING - DRILLING - CTO WIRES

Gram/πr²

Tip Load Tester

Regalia  Command  Gladius  V14  Halberd  Winn 200T

Astato XS 20  20 g

Astato XS 40  40 g

• Complex cases
  ✓ (long) CTO’s, different Ca²⁺ levels
  TRY TO STAY INTRALUMINAL
  ✓ Proximal cap penetration
  ✓ Following microchannels
  ✓ Delivery of devices

Penetrating Wires
Drilling Wires
CTO Wires
PENETRATING - DRILLING - CTO WIRES

Complex cases
- (long) CTO's, different Ca^2+ levels

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

With the courtesy of R Ferraresi
DISSECTING WIRES

SPECIFICATIONS
ASAHI Gladius MG 14 PV ES

- HIGH SUPPORT
  strong push force
  easy device delivery

- HIGH LUBRICITY
  (polymer jacket)

- ACT ONE
  1:1 torque

- PRE SHAPED TIP

- MICRO-GAP FOR NARROW LOOPING
DISSECTING WIRES

High supportability delivers a strong push force and is needed for device delivery.

A modified distal core with micro gap creates a narrow loop at the tip.

- Complex cases
  ✓ (long) CTO’s, different Ca+ levels
- Subintimal recanalization
  ✓ Re-entry difficulties

Image figure of the core
DISSECTING WIRES

- short loop, subintimal tract
- Bolia technique
- Spinning loop
- Enforcing re-entry
DISSECTING WIRES

- Complex cases
  - (long) CTO's, different Ca+ levels
- Subintimal recanalization
- Re-entry difficulties

DISSECTING WIRES
**Guidewire algorithm conclusion**

<table>
<thead>
<tr>
<th>WIRE CHARACTERISTICS</th>
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<tr>
<td>ASAHI GLADIUS 14</td>
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<tr>
<td>HYDROSATE TIP LOAD</td>
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<tr>
<td>DEPLETED JIGS FOR LUMINITY</td>
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<td>ACT ONE FOR AXIS CONTROL</td>
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<td>LUMENFIT AND ACCESSIBILITY FOR TRAJECTABILITY</td>
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<table>
<thead>
<tr>
<th>LESION CHARACTERISTICS</th>
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<tbody>
<tr>
<td>NON CTO</td>
</tr>
<tr>
<td>STENOSIS</td>
</tr>
<tr>
<td>SHORT CTO &lt;100MM</td>
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<tr>
<td>FIBRILL THROMBUS</td>
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<tr>
<td>CTO NON VISIBLE CA2+</td>
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<tr>
<td>NON AMBIGUOUS ROUTE CTO</td>
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<tr>
<td>LONG CTO &gt;100MM</td>
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<td>CTO VISIBLE CA2+</td>
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<td>AMBIGUOUS ROUTE CTO</td>
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<tbody>
<tr>
<td>SLIDING</td>
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<tr>
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<tr>
<td>PUNCTURING</td>
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<td>MARROW LOOMPING</td>
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### ASAHI HALBERD 16

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<th>Intermittent Tip Load</th>
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<tbody>
<tr>
<td>ACT ONE FOR AXIS CONTROL</td>
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<tr>
<td>EXT/LONG LEAD FOR EFFICACY</td>
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### ASTATO X5 20

<table>
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<tbody>
<tr>
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<td>TIP RESOLUTION, TIP FOR EFFICACY</td>
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### ASTATO X5 40

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### ASAHI GLADIUS MG 14 PV E5

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