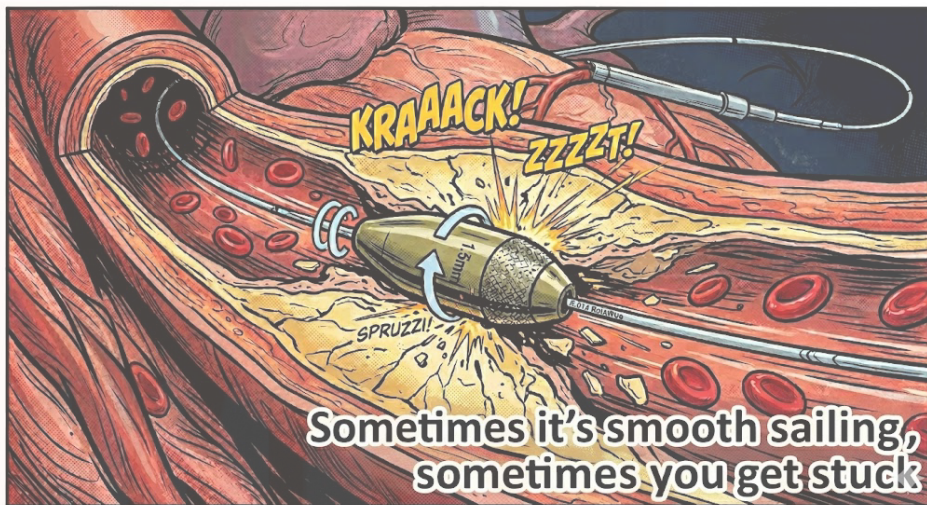




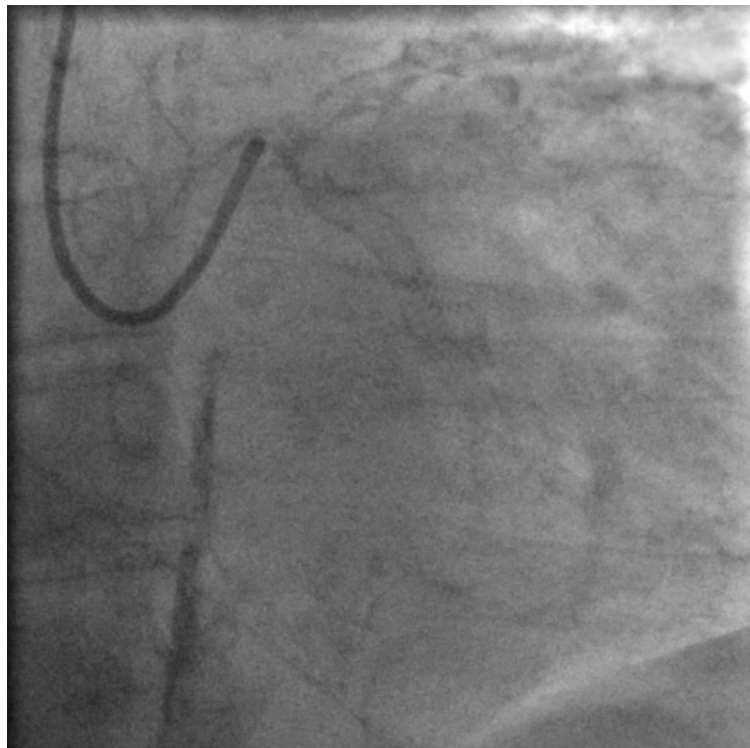
Complication Academy

Intrapped Rotablator burr

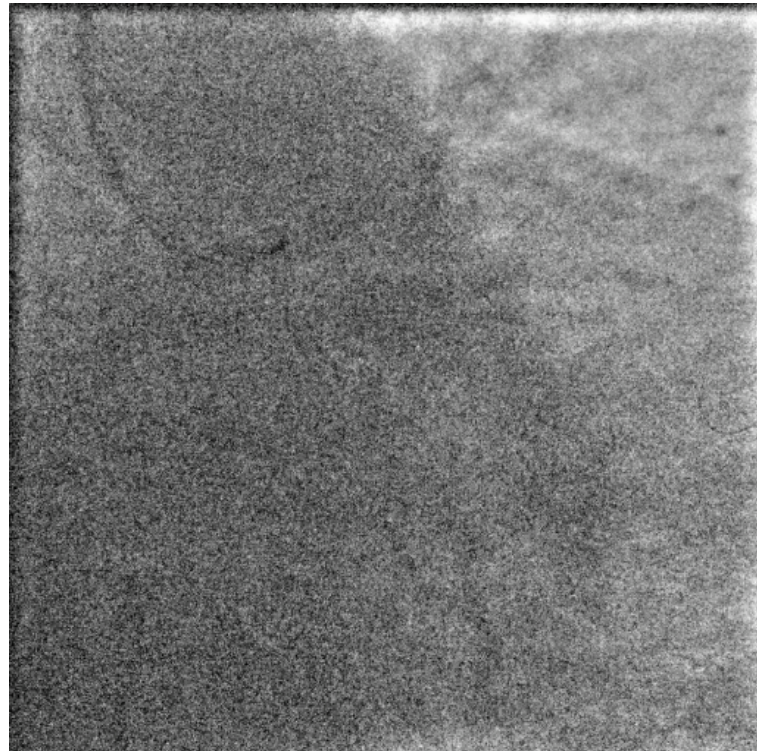
Notaristefano Salvatore
Azienda Ospedaliera di Perugia



Sometimes you win...



XB 3.5 7 Fr



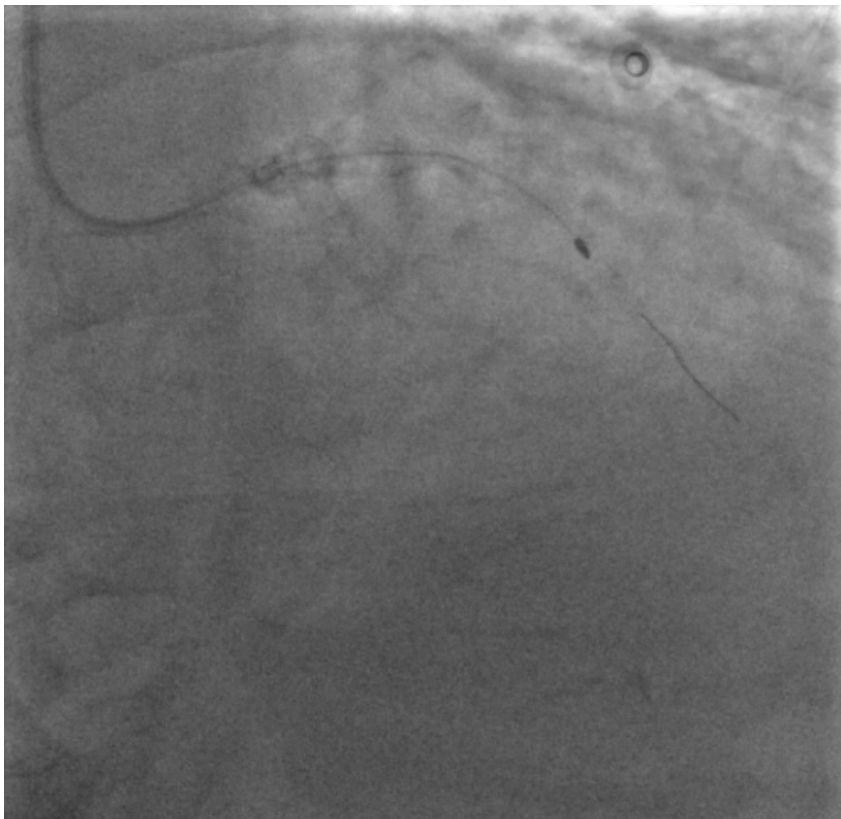
RotaPro 1.5 mm burr



Sometimes you learn...

Two mechanism of burr entrapment

- 1) **Kokesi phenomenon:** more likely to occur when a pecking-style forward motion is used and when a small burr is firmly pushed across a calcified narrowing at high rotational speed.
- 1) **Increasing resistance** leading to burr stalling. This occurs when larger diameter burrs are used in long, heavily calcified lesions.



Prevention:

- Not too large burr size.
- Use short, rapid "pecking" motions; avoid advancing beyond significant resistance.
- Watch RPM speed decrease and listen to the sound!



0. Nitroglycerine ?

1. **Low-speed rotation** while applying traction.

Apply in the order/combination you prefer the following steps:

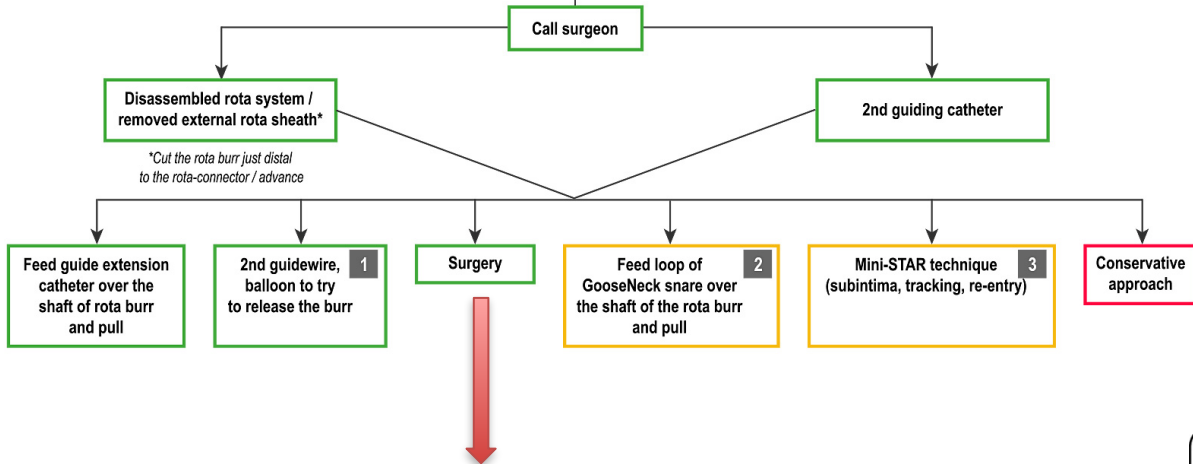
- **Deep Intubation:** Advance the guide catheter as close to the burr as possible to maximize traction support. With a 7Fr guiding catheter, after cutting the proximal end of the atherectomy catheter shaft and RotaWire, it's possible to advance a guide catheter extension.
- **Controlled Traction:** Apply steady manual pullback. Avoid excessive force to prevent wire fracture or vessel avulsion.
- **Side ballooning strategy:** Advance a guidewire (hydrophilic and stiffer) parallel to the burr and perform **sequential balloon dilatations** (starting at 1.5mm) to "crack" the calcium and create clearance. Feasible with one access, also possible with a dual-access technique.
- 1. - **Snare Technique:** Use a snare for extra traction on the burr or drive shaft (risk of breakage).
- For refractory cases, adopt **CTO strategies**. Access the subintimal space proximal to the burr with a specialized wire and perform **progressive subintimal ballooning** (up to 3.0mm) to dislodge the device.



A lot of algorithms!

STUCK BURR (IN OR BEYOND STENOSIS) KOKESHI PHENOMENON

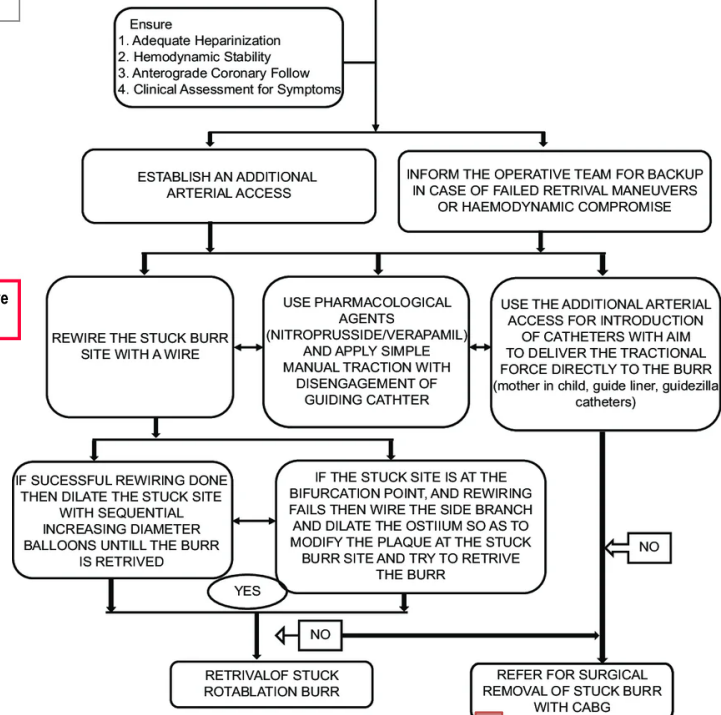
- Recommended approach
- May be a valid option
- Not recommended

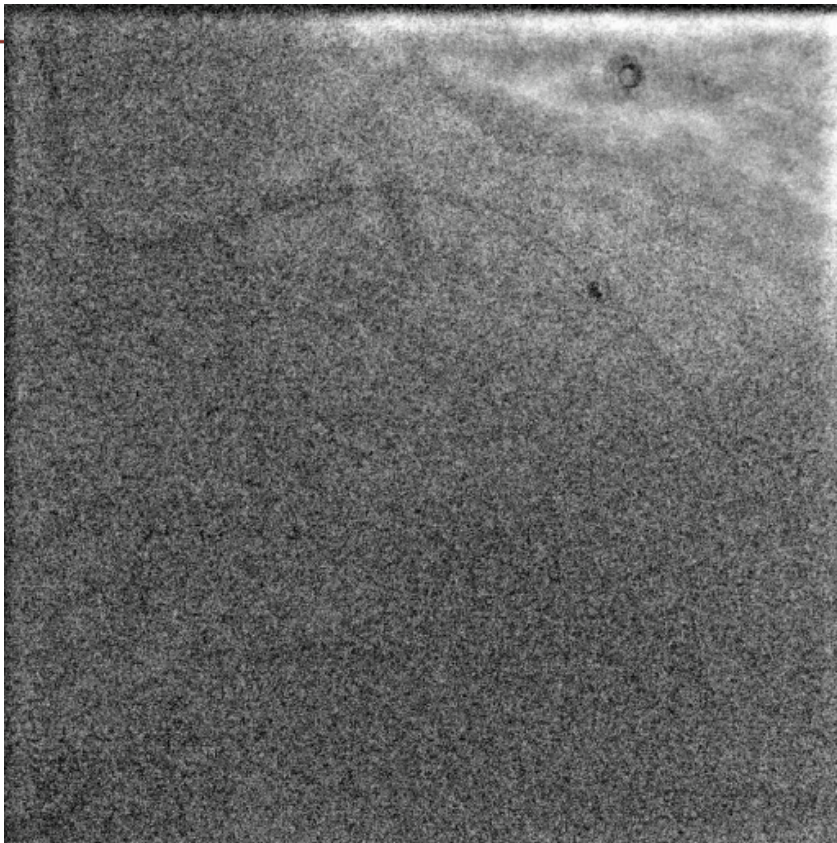


Surgical referral if endovascular attempts fail or life-threatening complications arise:

- Major vessel perforation or shaft/wire fracture.
- Persistent TIMI 0 flow with refractory ischemia.
- Hemodynamic instability requiring mechanical circulatory support.

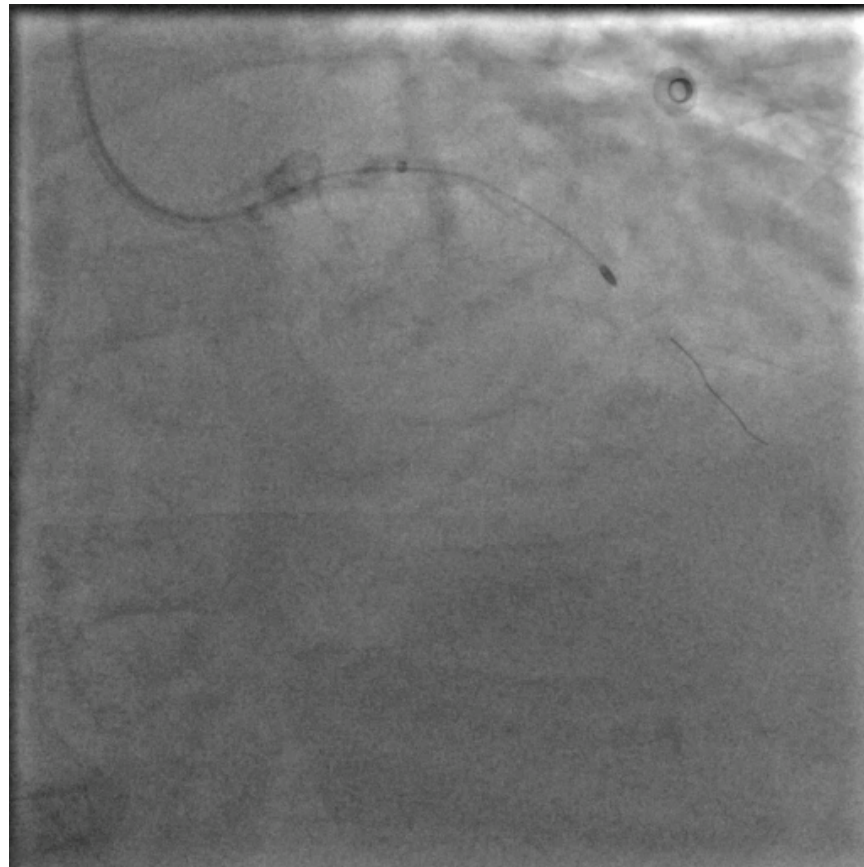
STUCK ROTABLATION BURR





rewiring

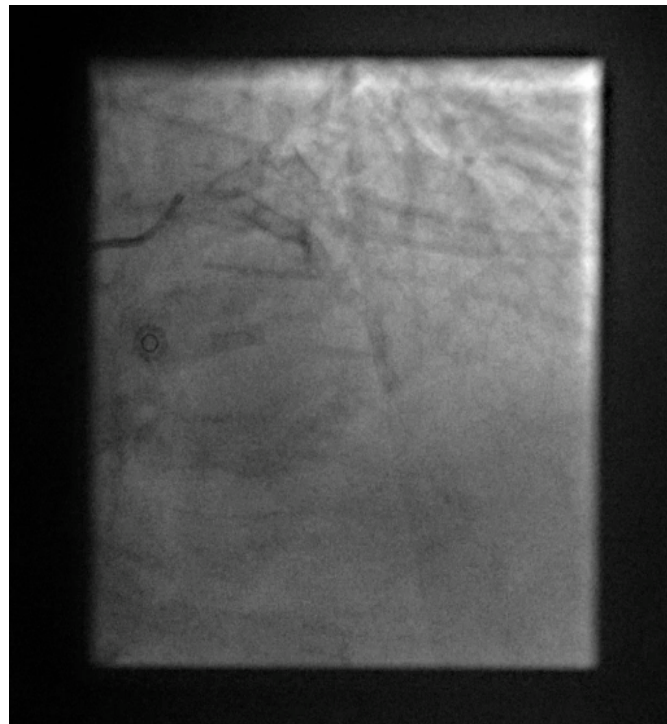
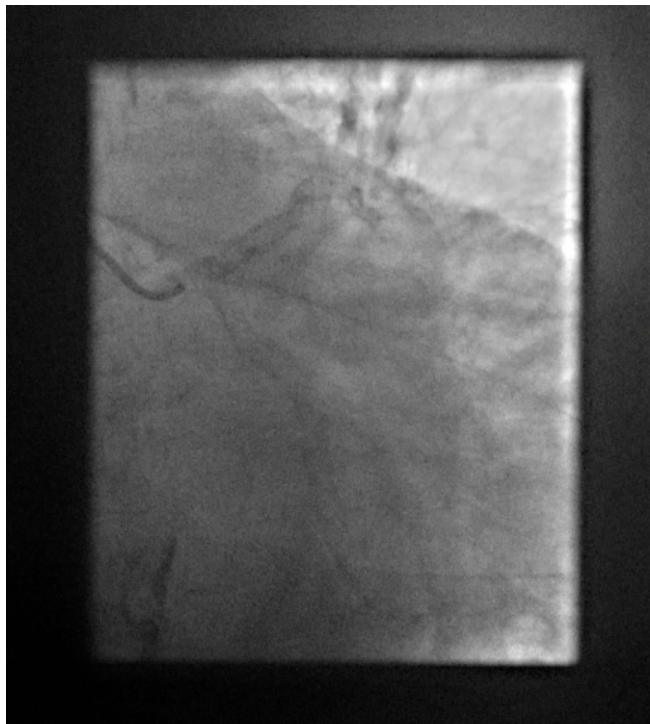




GuideLiner 6Fr



Final result after PCI and stenting on LAD



Thank you for your attention

