

Between a Rock and No Place

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Clinical history

- 73 year old female with past history of:
 - Diabetes
 - Hypertension
 - Dylipidemia
- Approximately 6 -9 month history of right lower extremity claudication at 1-2 blocks, progressive
- Right ABI 0.6 at rest, pattern suggesting ilio-femoral disease



Iliac artery angiogram



Right CFA angiogram



Right SFA angiogram



Right infra-popliteal run-off



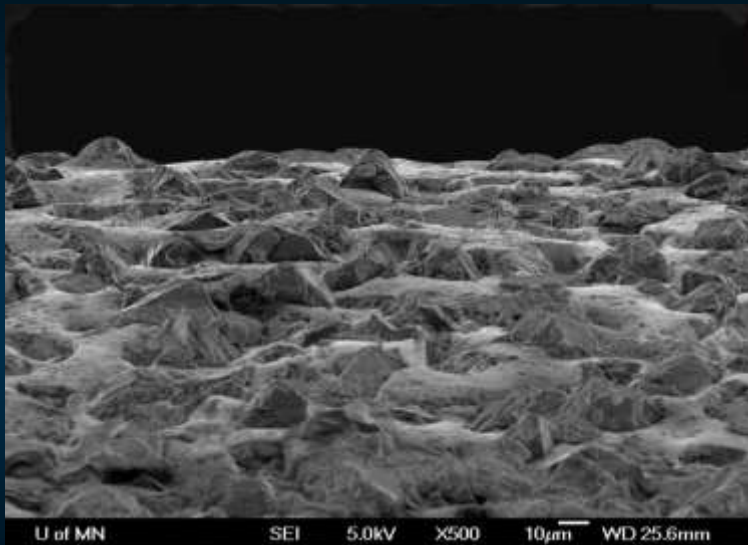
Options??



Orbital Atherectomy System (CSI)

Crown

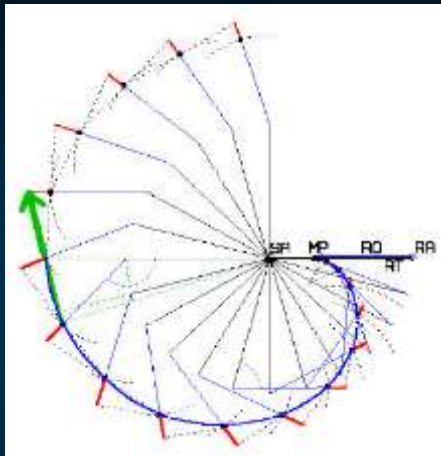
- Diamond grit coated
- Creates lumen 1.75x greater than crossing profile



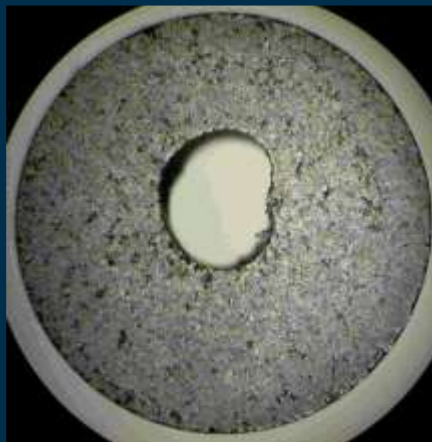
Mechanism of Action: Differential Sanding

Speed = Lumen Size

- Increased speed and/or increased mass increase the *centrifugal force*
- Greater centrifugal force creates bigger lumens



$$CF \approx \frac{\text{Mass} \times \text{Rotational speed}^2}{\text{radius of the orbit}}$$



1.9mm crown at 80k RPMs



1.9mm crown at 200k RPMs



BSC/Pathway Jetstream

Distal Tip



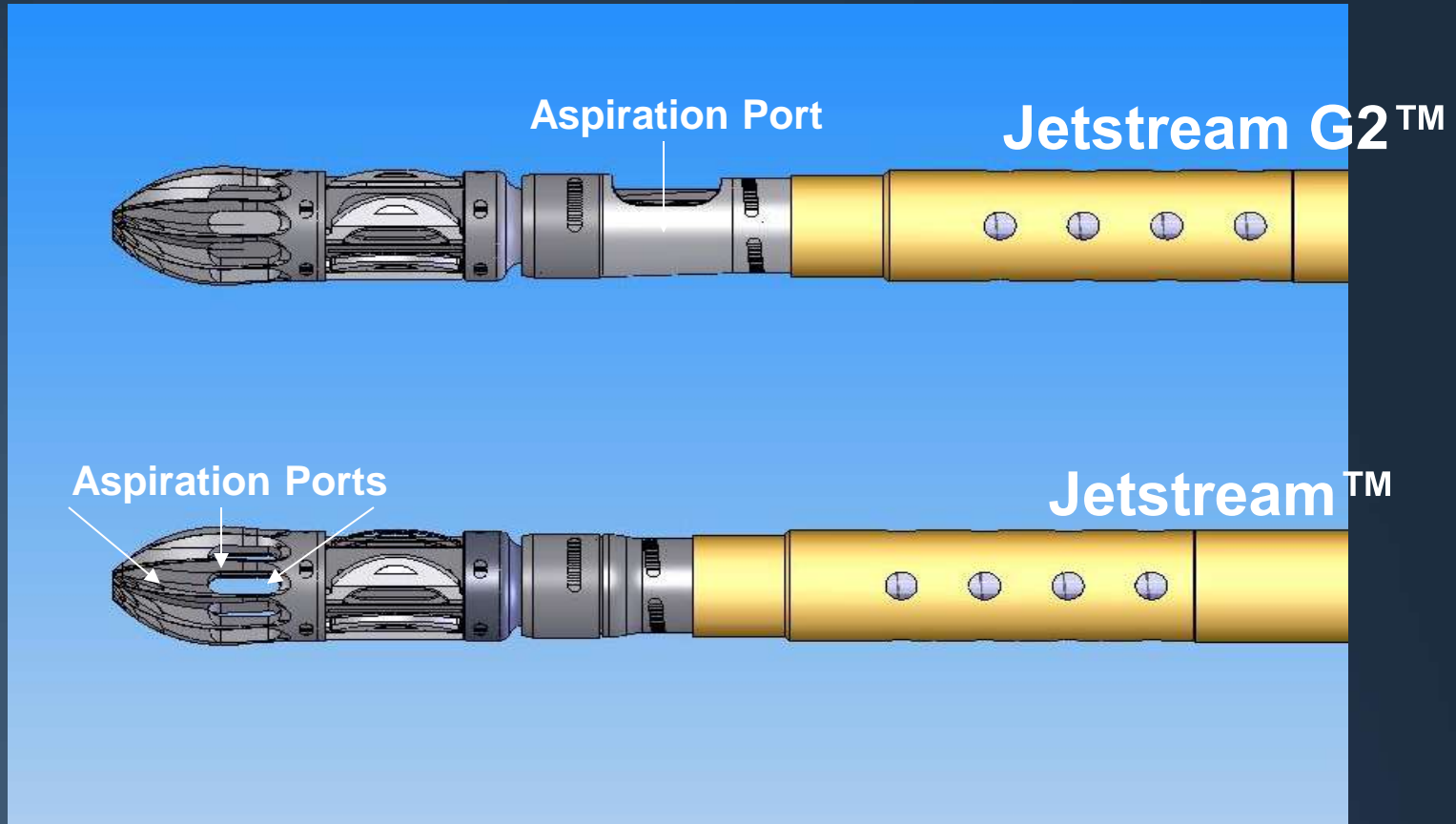
Control Pod



- Differential cutting tip removes all plaque types
- Expandable blades offer single device solution
- Aspiration port collects plaque and thrombus



Jetstream evolution: Proximal Aspiration Port



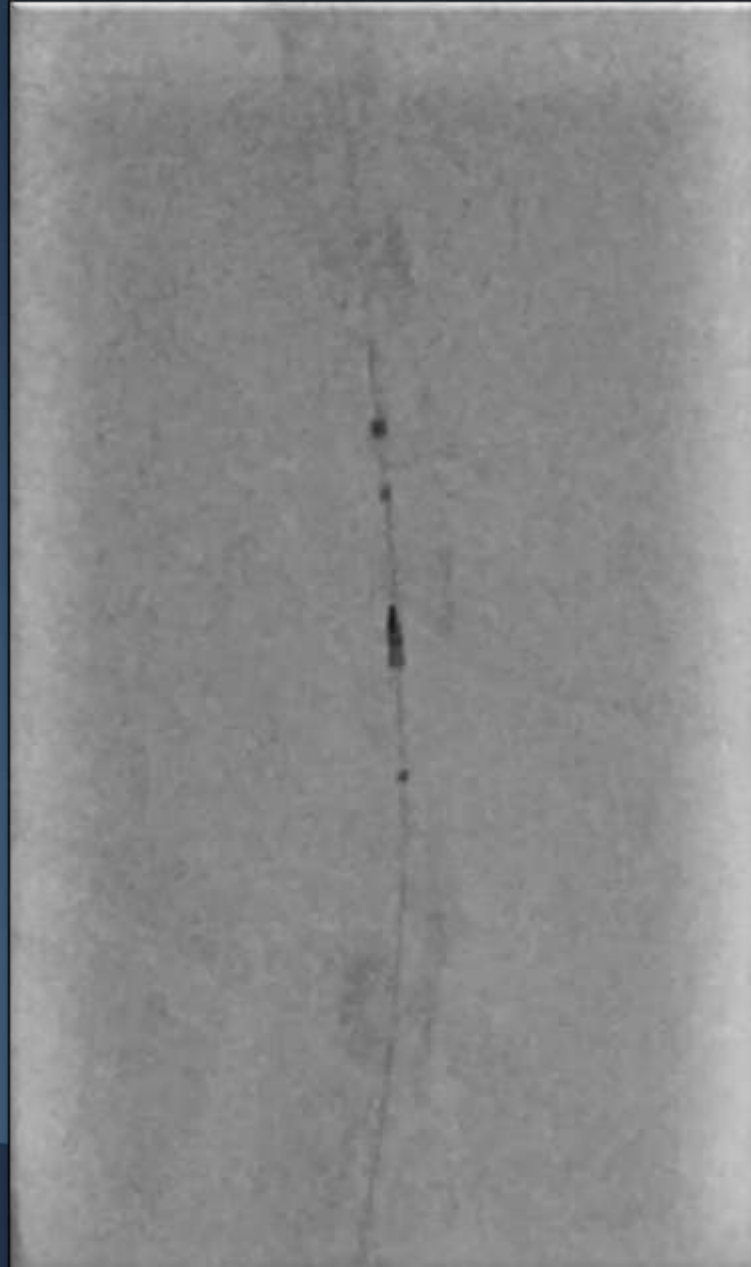
Asahi Miracle 6 crossing lesion



Pre-dilation prior to filter placement



Emboshield filter deployment



Jetstream atherectomy



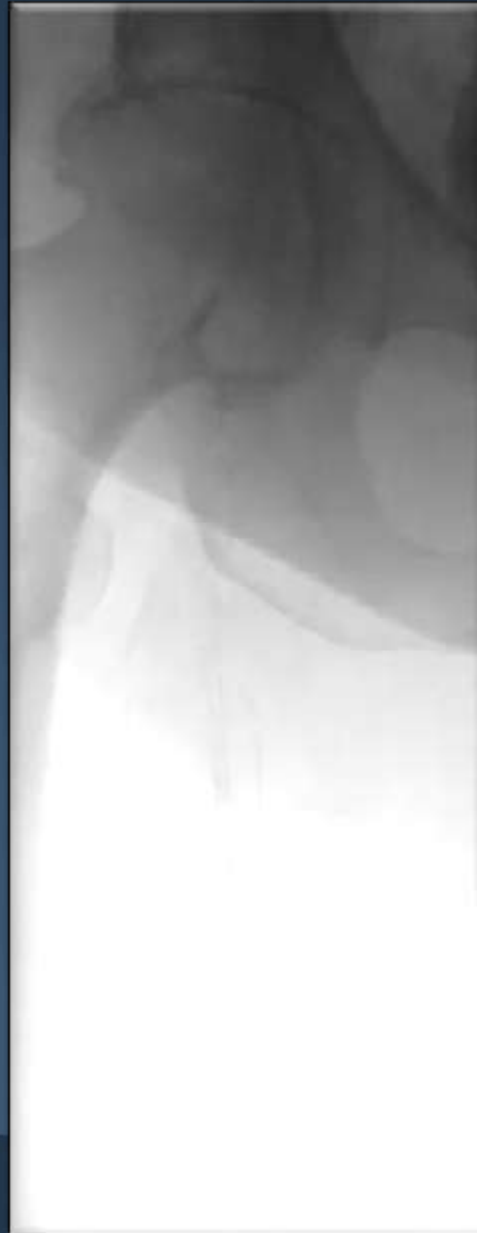
Angiosculpt 7 x 100 mm



7 x 120 IN.PACT DCB



Final angiogram



Run-off angiogram without emboli

