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ELUVIA™ DRUG-ELUTING VASCULAR STENT SYSTEM

CASE 2 | TREATING A HIGHLY CALCIFIED LONG SFA CTO USING THE SEISMIQ™ INTRAVASCULAR LITHOTRIPSY SYSTEM AND THE ELUVIA™ DRUG-ELUTING VASCULAR STENT SYSTEM

PRESENTED BY:

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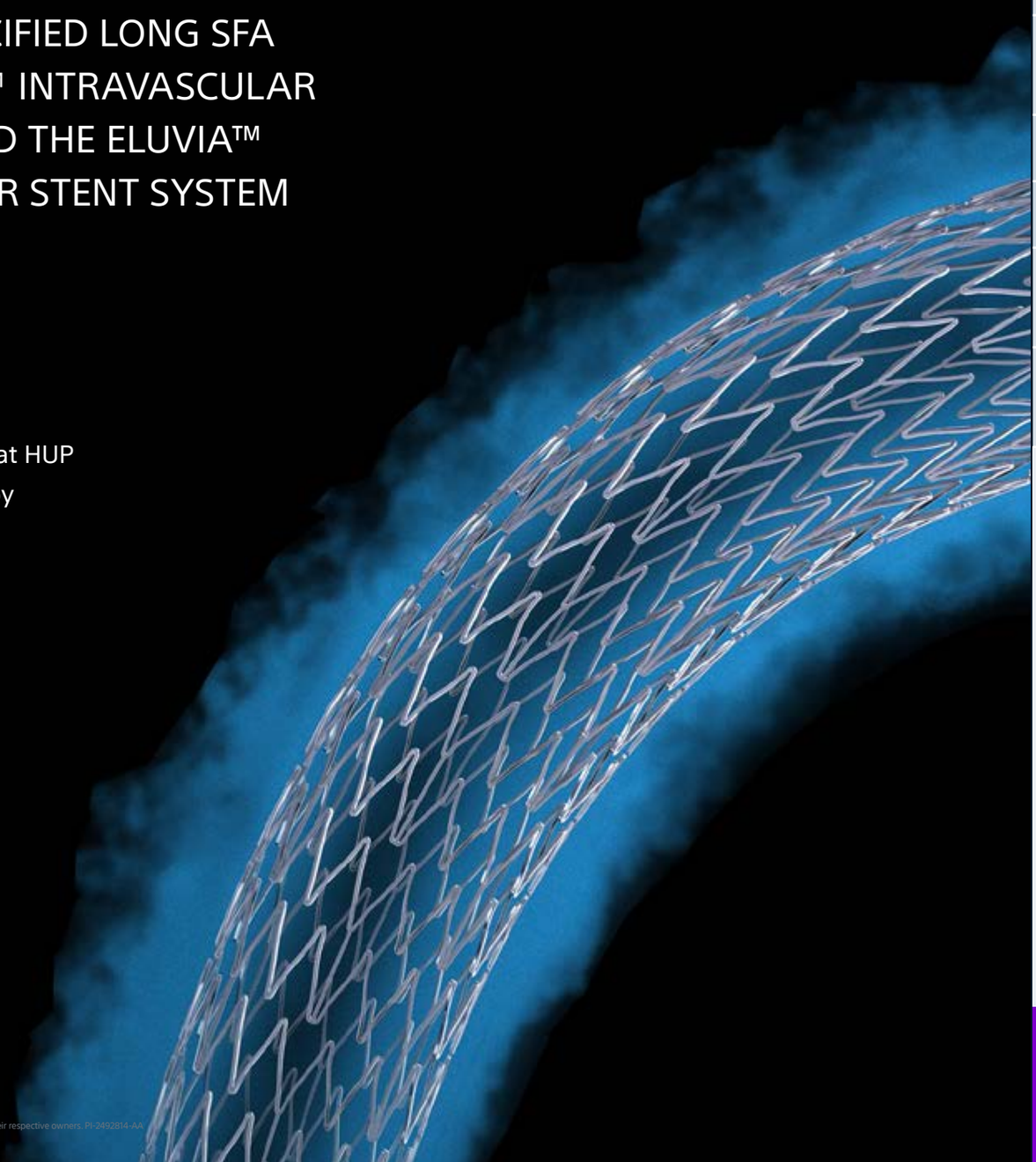

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HISTORY

PATIENT DEMOGRAPHICS

71-year-old patient

PRESENTING SYMPTOMS

Rapidly progressive left lower extremity rest pain and tissue loss

MEDICAL HISTORY

Dialysis-dependent end-stage renal disease

- Diabetes mellitus

Multilevel peripheral arterial disease

High likelihood of severe arterial calcification

NONINVASIVE VASCULAR ASSESSMENT

Markedly diminished arterial waveforms

Toe pressure:

- 20 mmHg
- Flatline contour

CLINICAL INTERPRETATION

Clinical presentation consistent with critical limb threatening ischemia (CLTI)

DIAGNOSTIC FINDINGS

CROSS-SECTIONAL IMAGING

CT scan findings:

Common femoral artery: widely patent

Calcification increased upon entering SFA

FEMOROPOPLITEAL SEGMENT

Superficial femoral artery (SFA):

- Dense, nodular, circumferential, boulder-like calcium

Above-the-knee popliteal artery:

- Severe calcification
- Remained patent despite disease burden

DISTAL VESSEL ASSESSMENT

Tibial runoff:

- Significant multilevel disease
- Required additional below-the-knee intervention

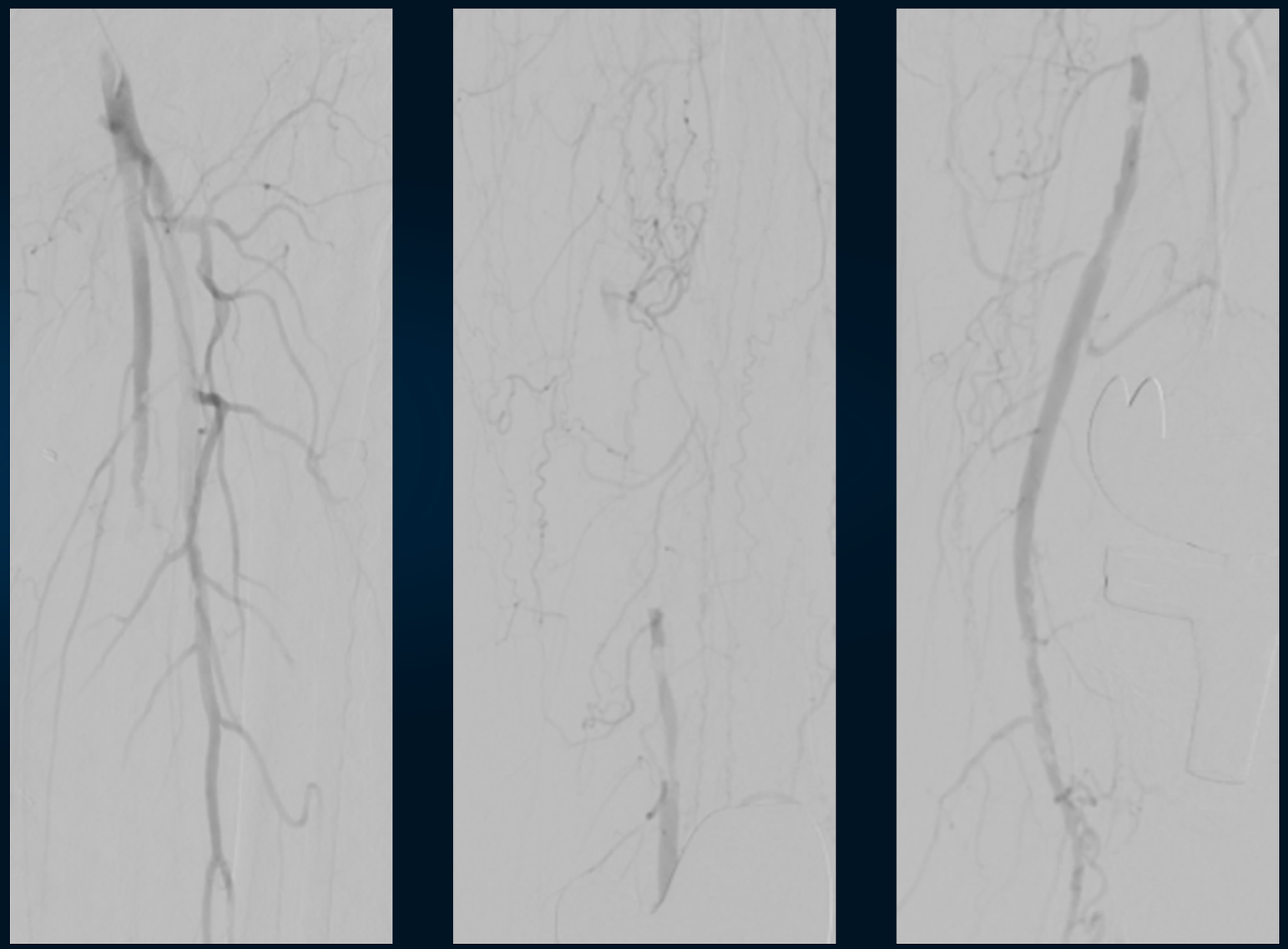
OVERALL ASSESSMENT

Long, severely calcified chronic total occlusion (CTO)

Complex anatomy with limited distal targets

DIAGNOSTIC FINDINGS

INITIAL ANGIOGRAM



TREATMENT APPROACH

LESION CHARACTERISTICS

Long segment CTO

Severe, nodular, circumferential calcification

KEY PROCEDURAL RISKS

High risk of:

- Dissection
- Vessel recoil
- Underexpansion
- Restenosis

ANATOMIC CHALLENGES

Dense calcium significantly limited:

- Lesion crossing
- Vessel compliance

SURGICAL CONSIDERATIONS

Open bypass highly morbid and unfavorable due to:

- Renal failure
- Poor distal targets
- **Limitations of alternative endovascular strategies**

"Leave nothing behind" approaches deemed unsuitable due to:

- High risk of recoil
- Residual stenosis
- Restenosis in heavily calcified disease

TREATMENT STRATEGY GOALS

Effective calcium modification

Creation of a durable flow channel

Long-term suppression of neointimal hyperplasia

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TREATMENT APPROACH | CALCIUM MODIFICATION STRATEGY

SELECTED TECHNOLOGY

SEISMIQ™ Intravascular Lithotripsy (IVL) System

RATIONALE FOR SEISMIQ™ IVL SELECTION

Directionally align emitters to calcified segments

Select specific emitters (on/off) to preserve pulses

Precisely target acoustic energy

Uniform energy delivery with laser-based IVL technology

IVL TREATMENT TECHNIQUE

Delivery from below the knee upward

Focused treatment of:

- Nodular distal SFA lesion
- Circumferentially calcified proximal SFA

RESULT OF CALCIUM MODIFICATION

Improved vessel compliance

Creation of a functional flow channel following dissection plane crossing

TREATMENT RESULTS & OUTCOMES

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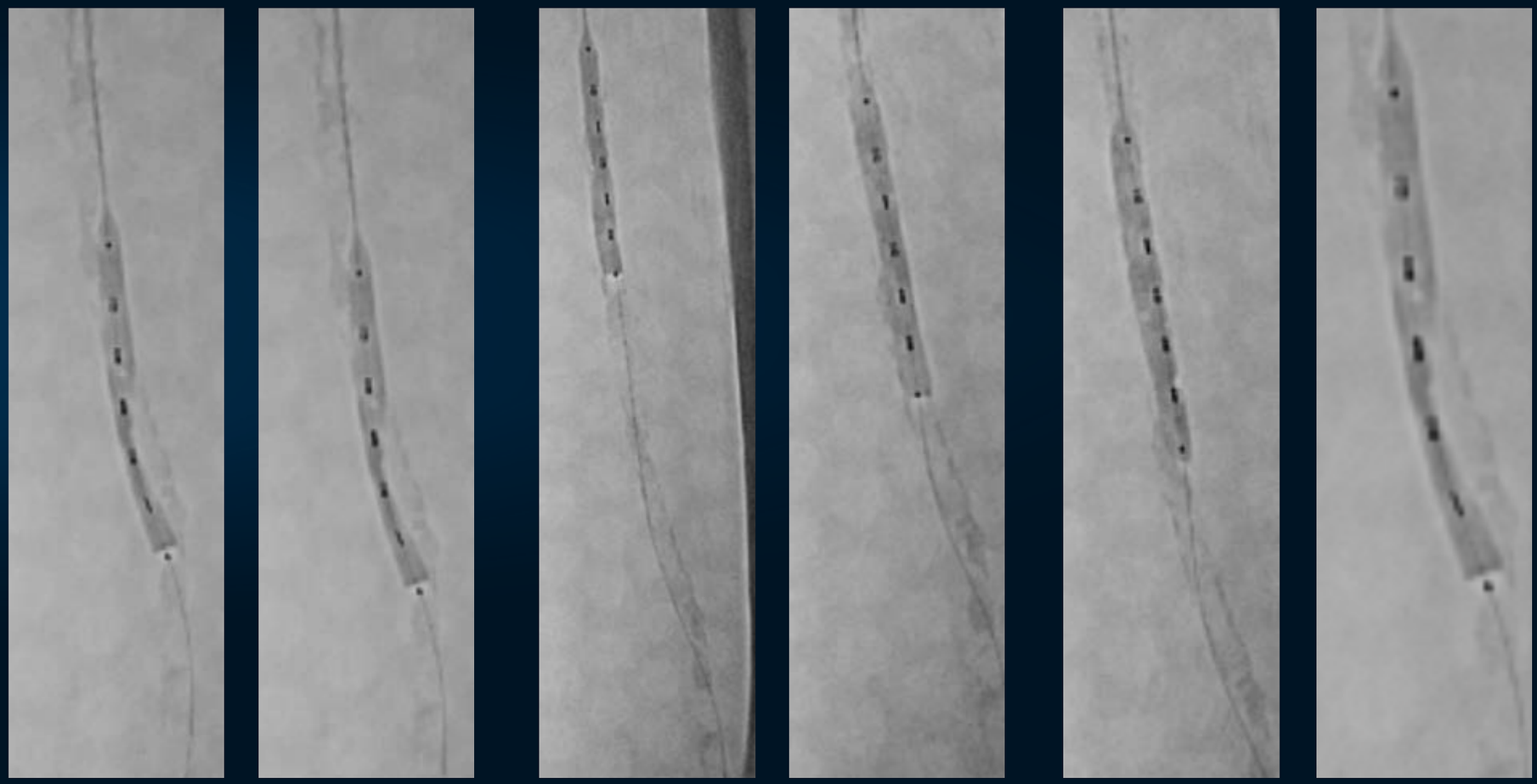
TREATMENT APPROACH | CALCIUM MODIFICATION STRATEGY

FOCUSING ON NODULAR CALCIUM

TREATING AREAS OF CIRCUMFERENTIAL CALCIUM

EMITTER SELECTION TO UTILIZE ALL PULSES AT DIFFICULT AREAS



TREATMENT APPROACH | DEFINITIVE TREATMENT STRATEGY

POST PREPARATION ASSESSMENT

Persistent high risk lesion morphology

Long lesion length

Presence of dissection

THERAPEUTIC GOAL

In heavily calcified anatomy:

- Maintain durable luminal gain
- Prevent elastic recoil
- Suppress neointimal hyperplasia

DEVICE STRATEGY

Use of a drug-eluting stent scaffold to:

- Maintain vessel expansion
- Address the high likelihood of restenosis with uncoated balloon angioplasty
- Deliver sustained antiproliferative therapy

TREATMENT RESULTS & OUTCOMES

IMPLANT PROCEDURE

STENT DEPLOYMENT

Vessel predilation

Three ELUVIA™ Drug-Eluting Vascular Stents were deployed

Achieved full coverage of long diseased segment

OPTIMIZATION

Postdilatation performed to:

- Optimize stent expansion
- Ensure adequate apposition

ADJUNCTIVE TREATMENT

Additional below-the-knee intervention:

- Addressed outflow disease
- Supported procedural durability

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IMPLANT PROCEDURE

ANGIO AFTER IVL ALONE

PTA WITH NC BALLOON

ELUVIA™ STENTING

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TREATMENT RESULTS & OUTCOMES

COMPLETION ANGIOGRAPHIC RESULTS

Excellent luminal gain

Complete resolution of:

- Balloon “wasting” observed prior to IVL

No significant residual stenosis

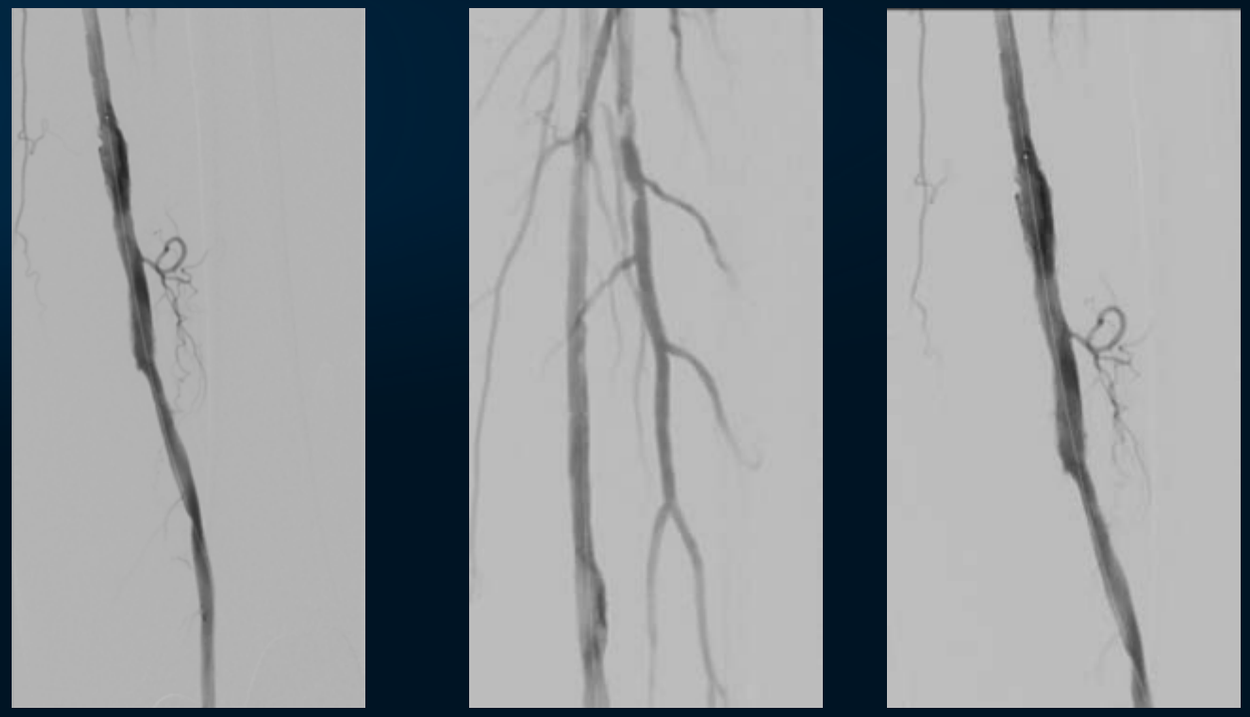
RUNOFF ASSESSMENT

Strong two-vessel runoff preserved

TECHNICAL OUTCOME

Durable expansion of stented SFA/popliteal segment

COMPLETION ANGIO	SFA/POP	



*Results from a single case. Individual outcomes may vary.

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TREATMENT RESULTS & OUTCOMES

CLINICAL FOLLOW UP

Six-week follow-up demonstrated:

- Positive tissue healing trajectory
- Early confirmation of treatment effectiveness

BEFORE

AFTER
6 WEEKS POSTOPERATIVE

LISTEN TO DR. GENOVESE HIGHLIGHT THE FULL CASE

CLINICAL SIGNIFICANCE

Highlights the critical role of the ELUVIA™ Drug-Eluting Vascular Stent System in:

- Long, heavily calcified femoropopliteal lesions
- CLTI patients with limited surgical options

INTEGRATED TREATMENT STRATEGY

SEISMIQ™ IVL:

- Enabled precise and effective vessel preparation

ELUVIA™ Drug-Eluting Vascular Stents:

- Provided sustained, controlled drug elution
- Maintained long-term luminal expansion
- Suppressed neointimal hyperplasia

PATIENT OUTCOME

- Durable revascularization
- Favorable early healing in a highly comorbid patient
- Successful outcome in a complex, calcified CTO

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ELUVIA™ Drug-Eluting Vascular Stent System
Indications, Safety, and Warnings

http://bostonscientific.com/eluvia-indications

SEISMIQ™ Intravascular Lithotripsy System
Indications, Safety, and Warnings

https://www.bostonscientific.com/seismiq-indications

Ranger™ Drug Coated Balloon
Indications, Safety, and Warnings

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