

CATH LAB

What's New and How it Will
Benefit Your Patients

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Heart disease

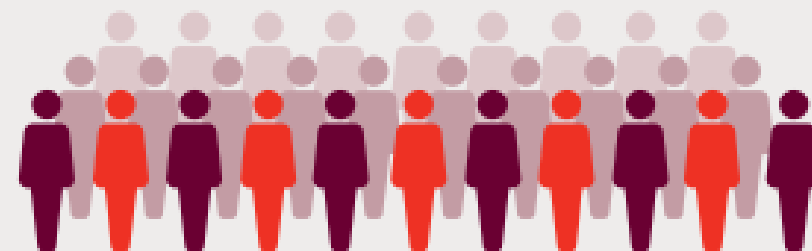
kills more women

than breast, cervical and ovarian cancer combined

Approximately

2 million

people in Ireland are at risk of or living with the long-term impacts of heart disease or stroke



Almost

9,000 people die

every year in Ireland from heart disease and stroke

Approximately

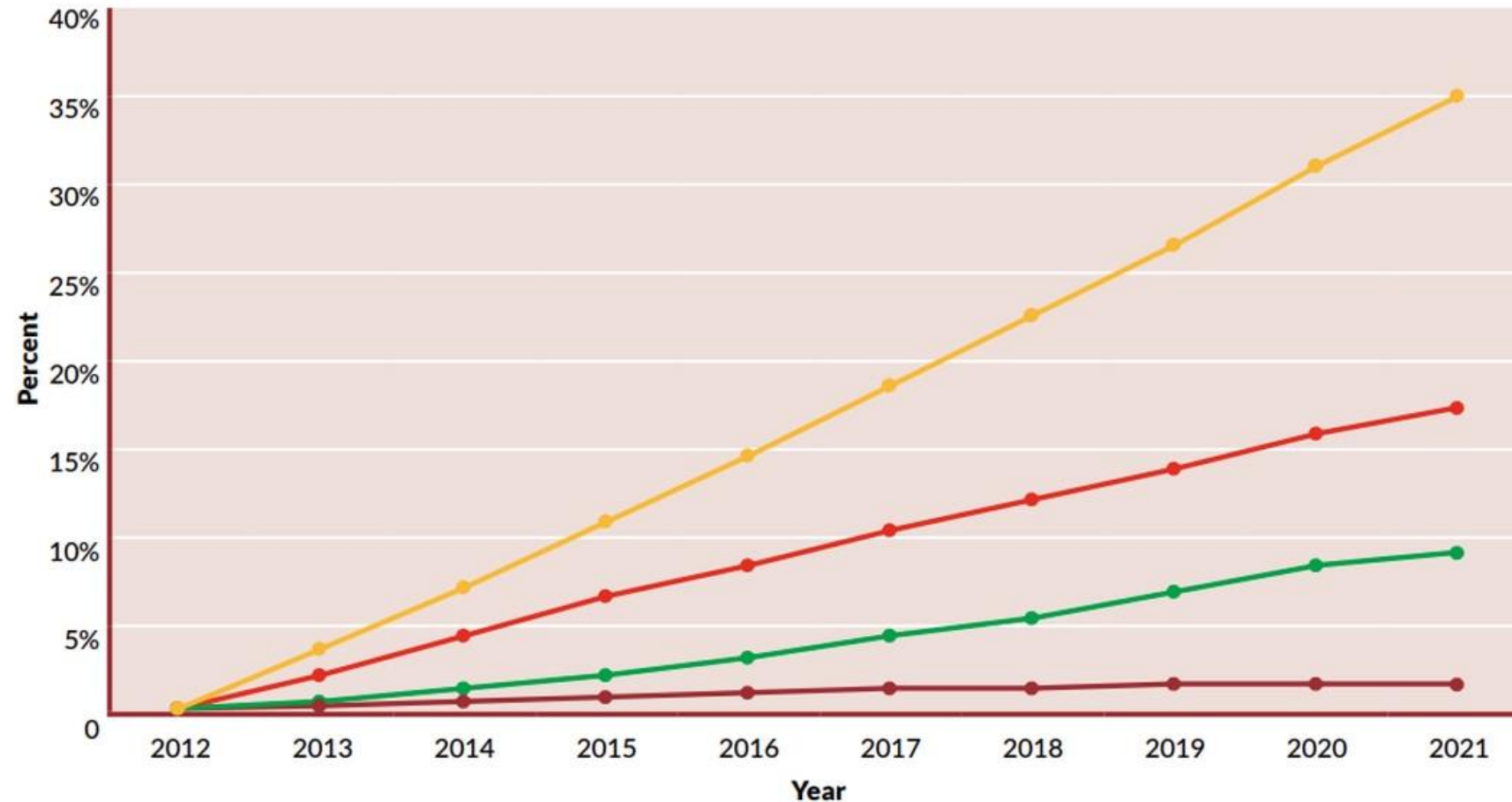


6,000

heart attack patients are admitted to hospital every year

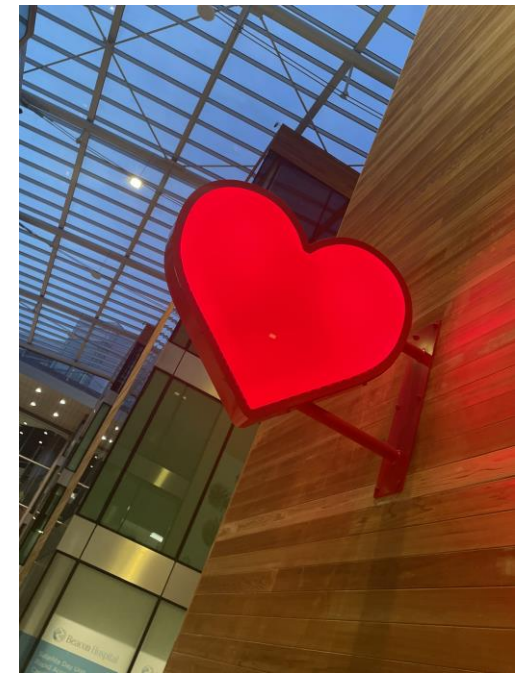
An Ageing Population

Cumulative Percentage Increase in Population, All Ages and 65+ for Ireland and EU-27, 2012 to 2021



Beacon Cardiology

- 25 Cardiology Consultants (Dublin and Limerick)
- Rapid Access Cardiology Clinic
- 2 State of the Art Cath Labs
- Cardiac Testing & Diagnostics - ECG, Echo, Stress Tests, Holter
- Radiology – CT coronary angiogram, Cardiac MRI
- Paediatric Cardiology Service
- Cardiothoracic Surgery
- Intensive Care – 8 ICU 6 HDU
- New Cardiology Clinic Limerick – Consultation & Testing
- Multidisciplinary - Consultant Cardiologists, Electrophysiologists, Cardiac Physiologists, Radiographers, Cardiac Clinical Nurse Specialists and Cardiac Physiotherapists.



Advances in the Cath Lab

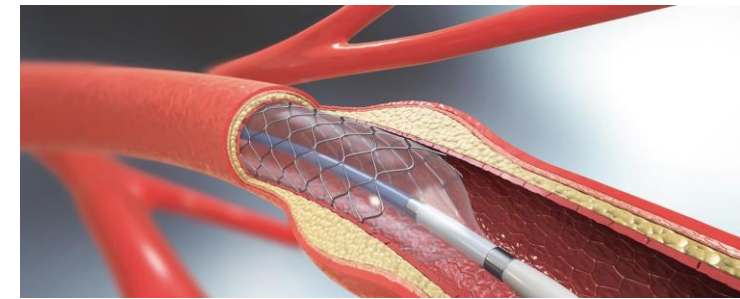
Advances have helped make procedures safer and more straightforward.

Technology allows us to make the right decisions in terms of whether patients should get stents, and then when needed, give us the enhanced ability to be able to get great results.

Advanced imaging, functional assessment, improved percutaneous techniques and cutting edge equipment allow us to deliver improved quality of life.

Angioplasty & Stenting

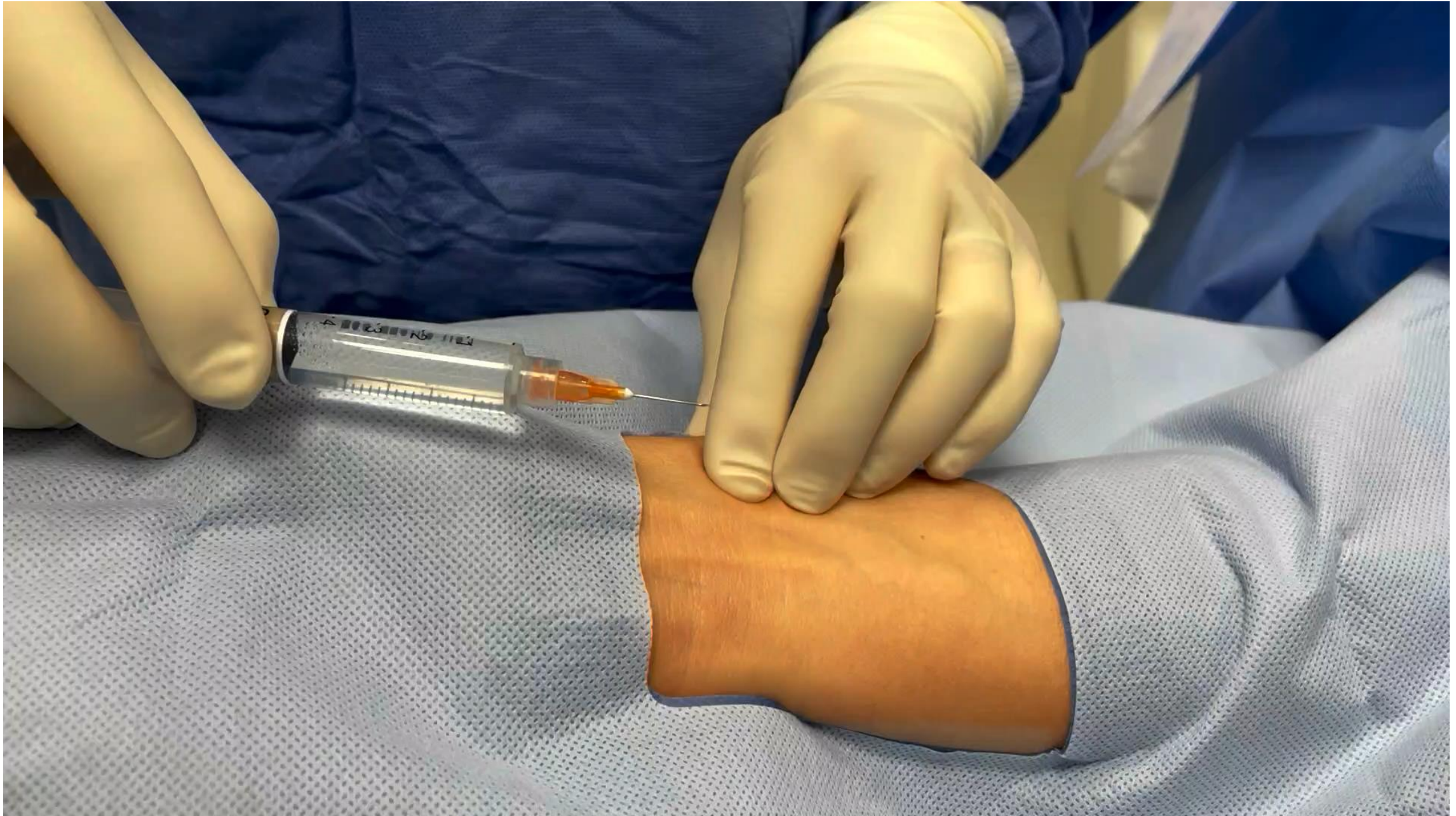
- First coronary angiogram 1958
- Angioplasty has been around for 45 years.
- Massive progress in stent design and production
 - Drug eluting
 - Less stent thrombosis and in-stent restenosis
 - More deliverable
 - Bifurcation and Left main indications
- Reduced patients requiring cardiac surgery



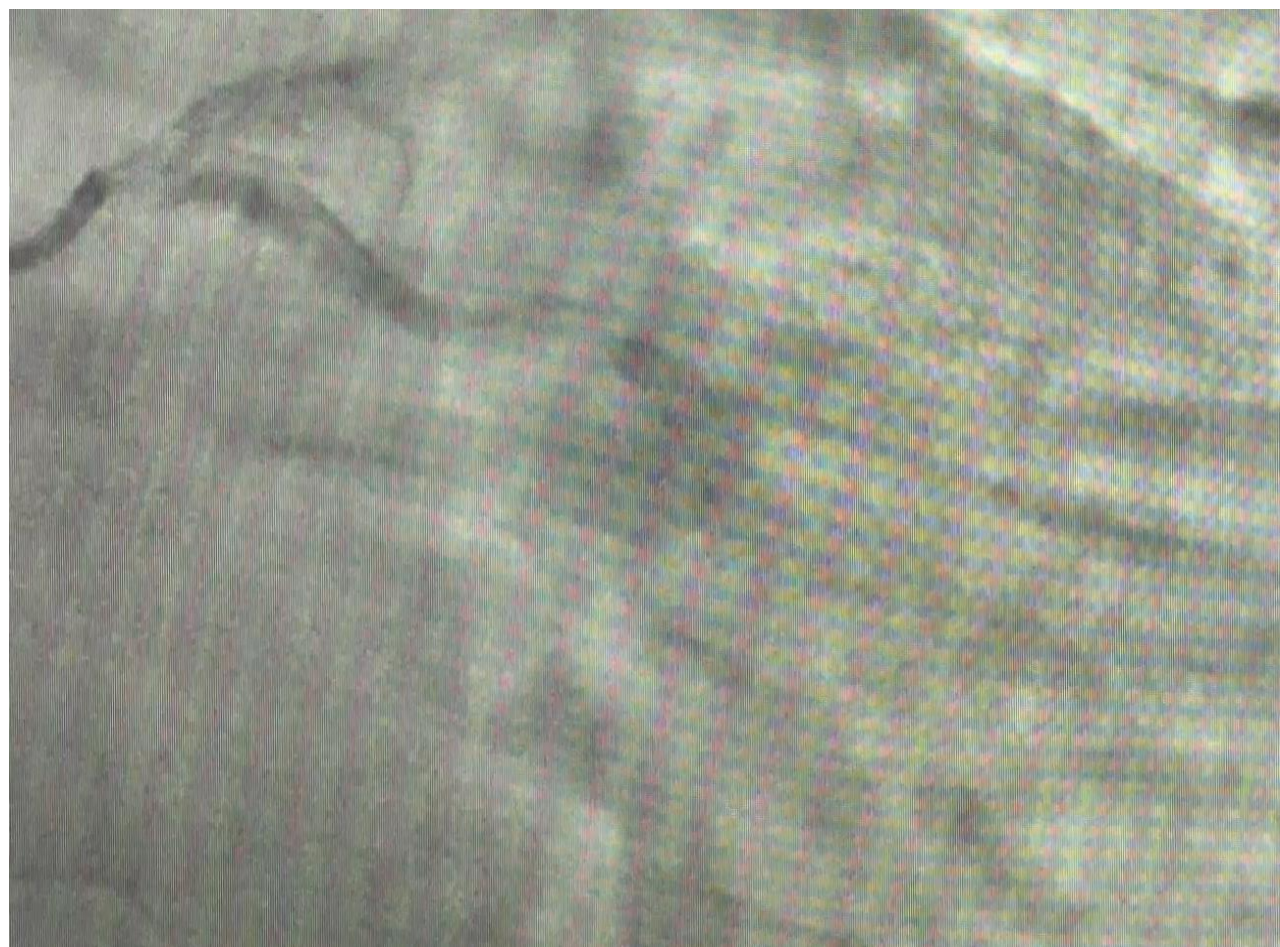
Advances & Developments in the Cath Lab

- Non-invasive imaging advancements
- Radial arterial access
- Imaging – IVUS, OCT
- Functional assessment
- Drug eluting balloons
- Shockwave, Diamondback
- TAVI, structural – valve in valve
- Alcohol septal ablation
- CTO techniques

Radial Arterial Access

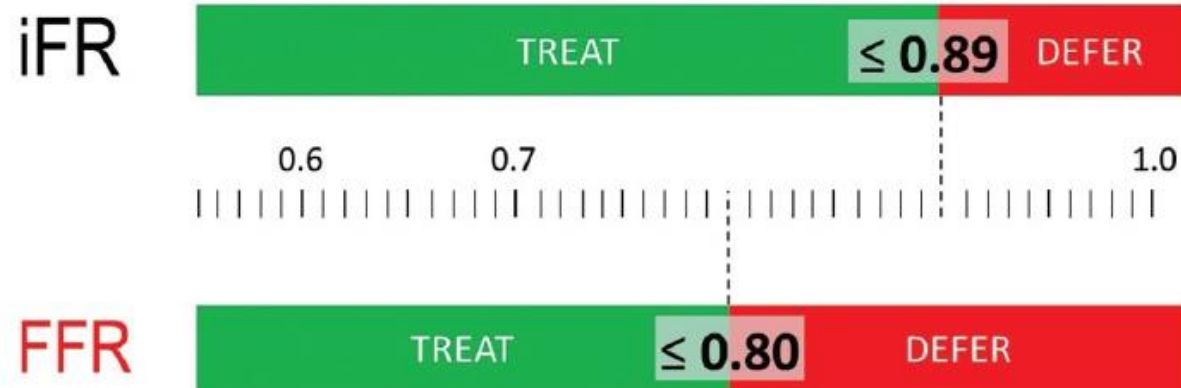
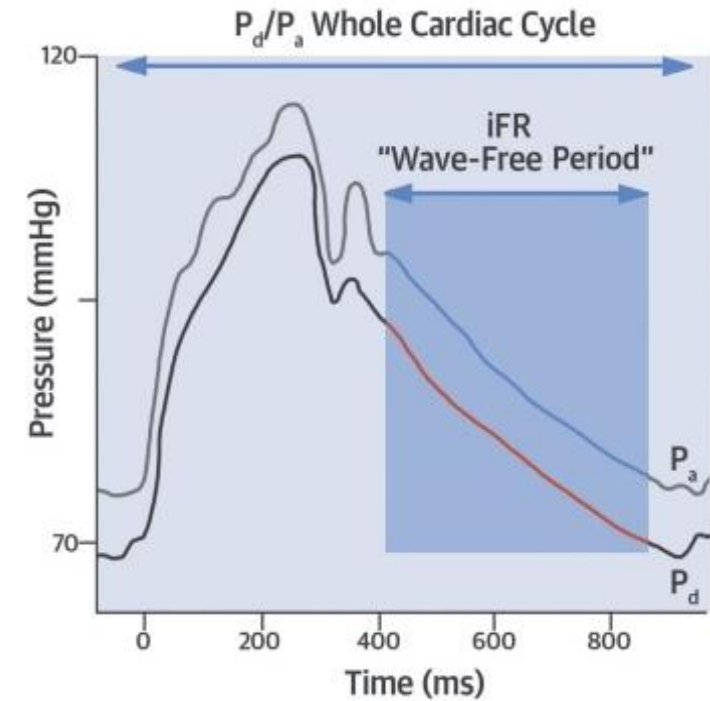
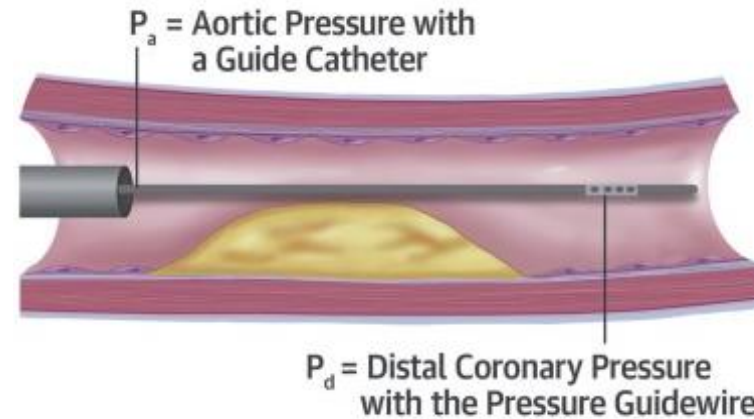


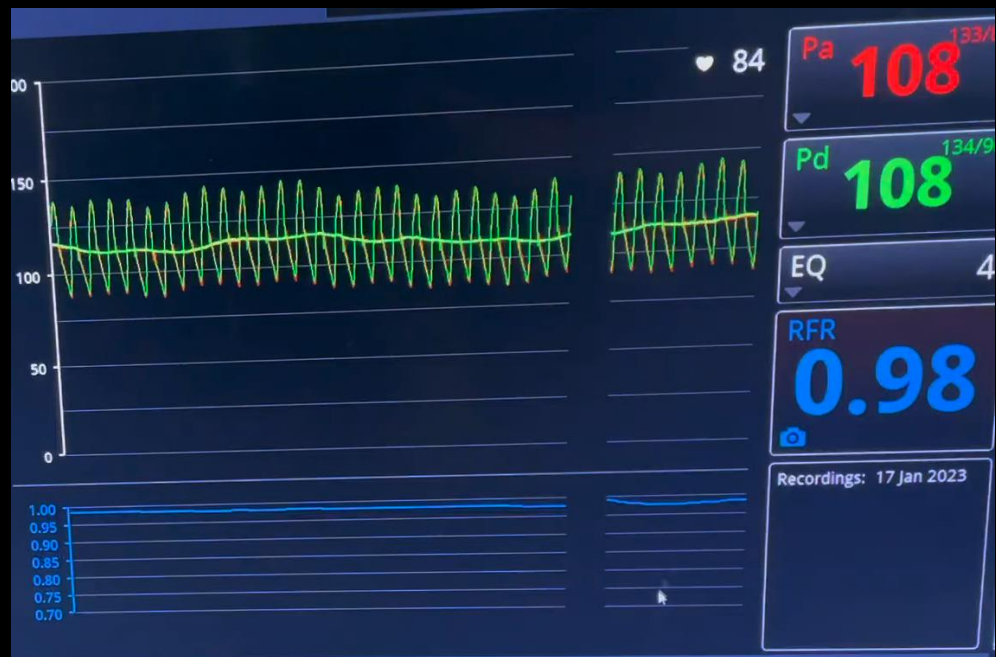
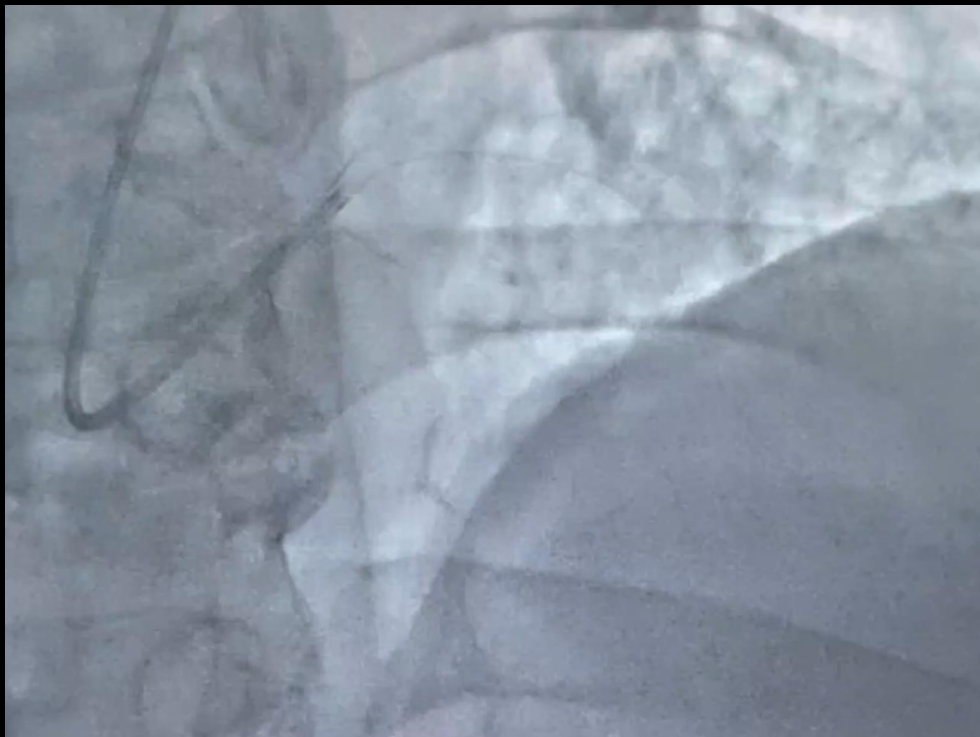
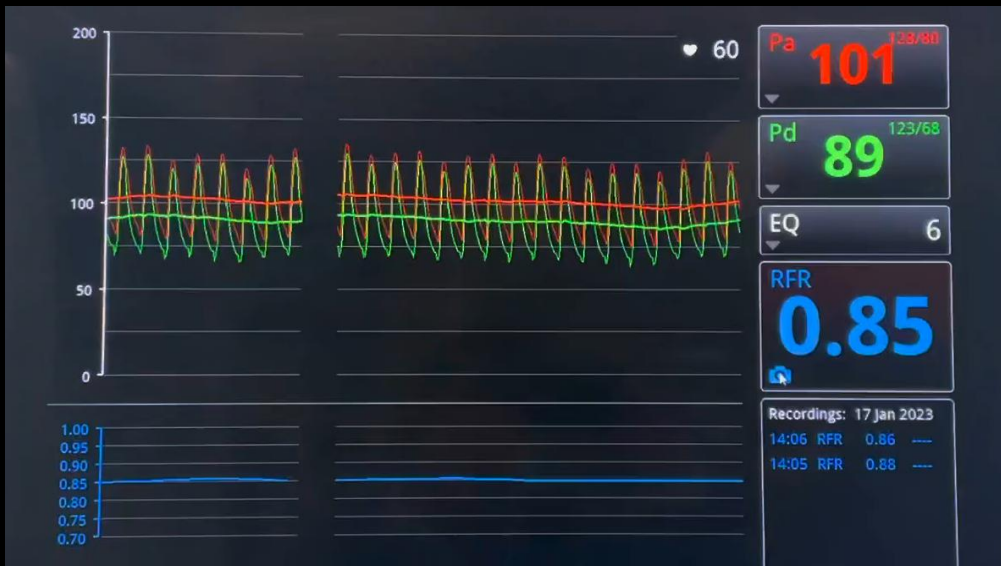
Coronary Angiogram



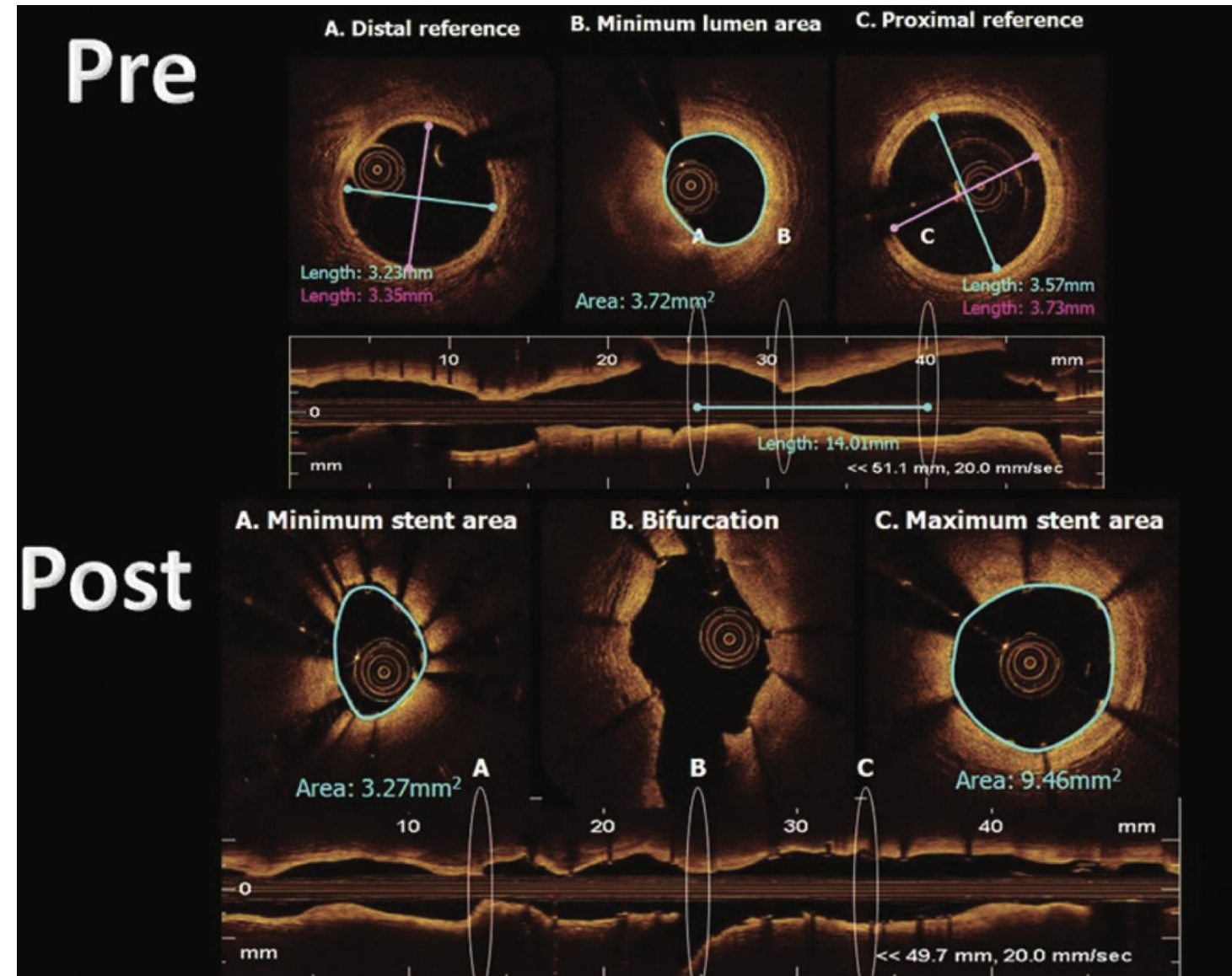
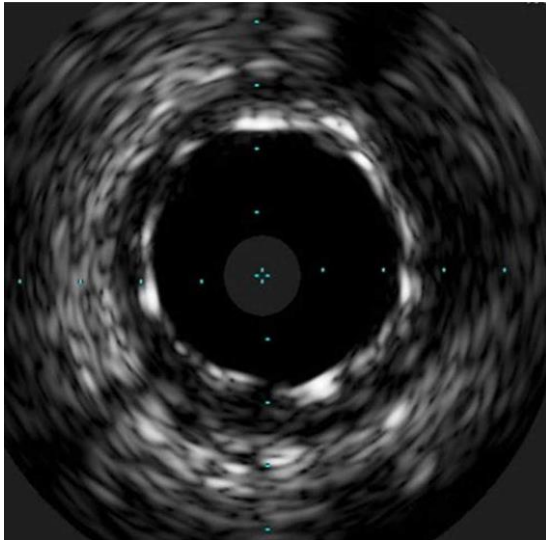
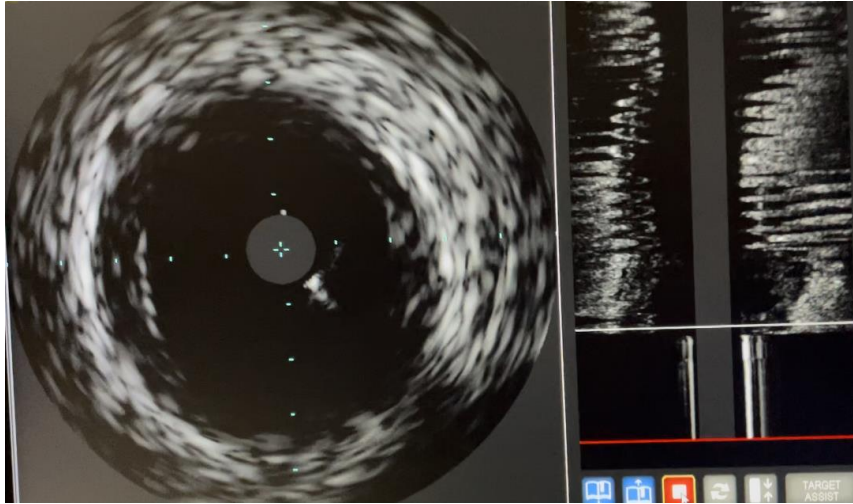
Functional Assessment

- FFR – Fractional Flow Reserve
- iFR – Instantaneous wave free ratio

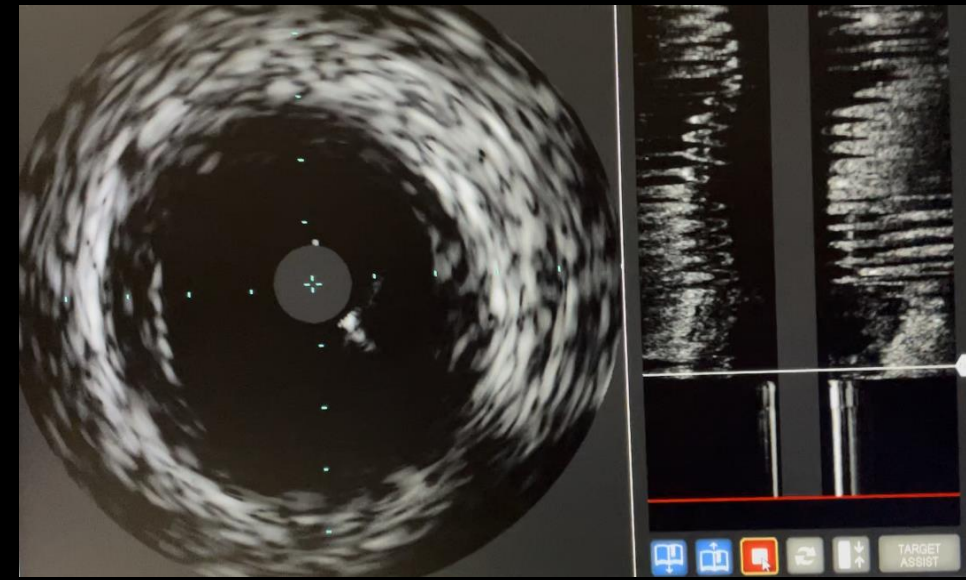
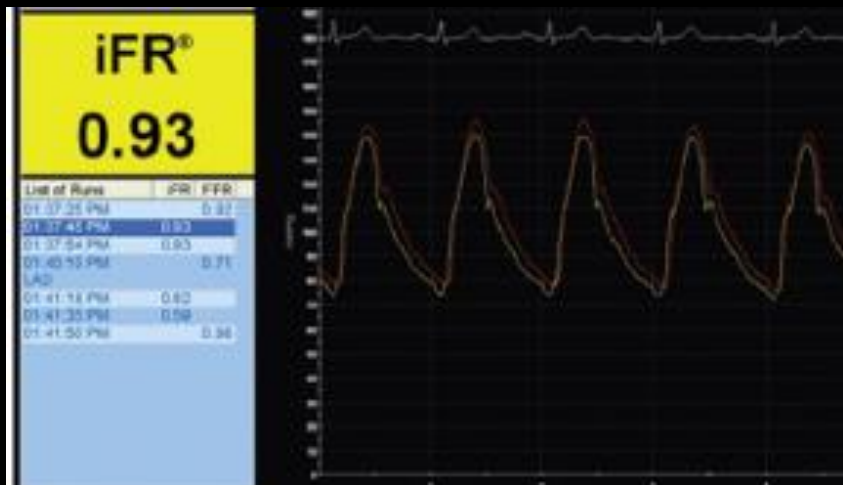
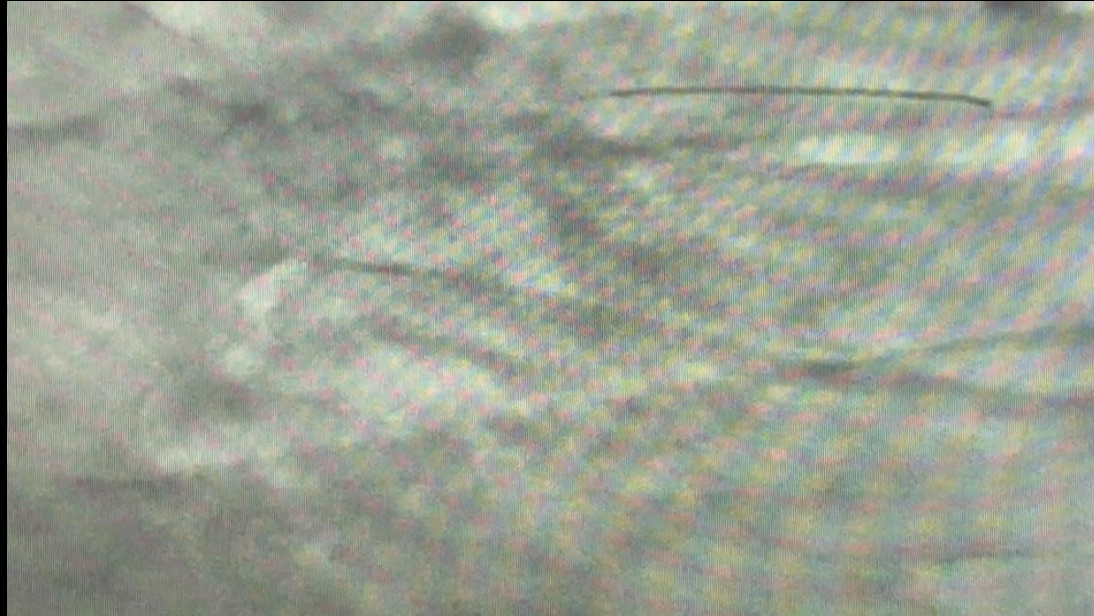


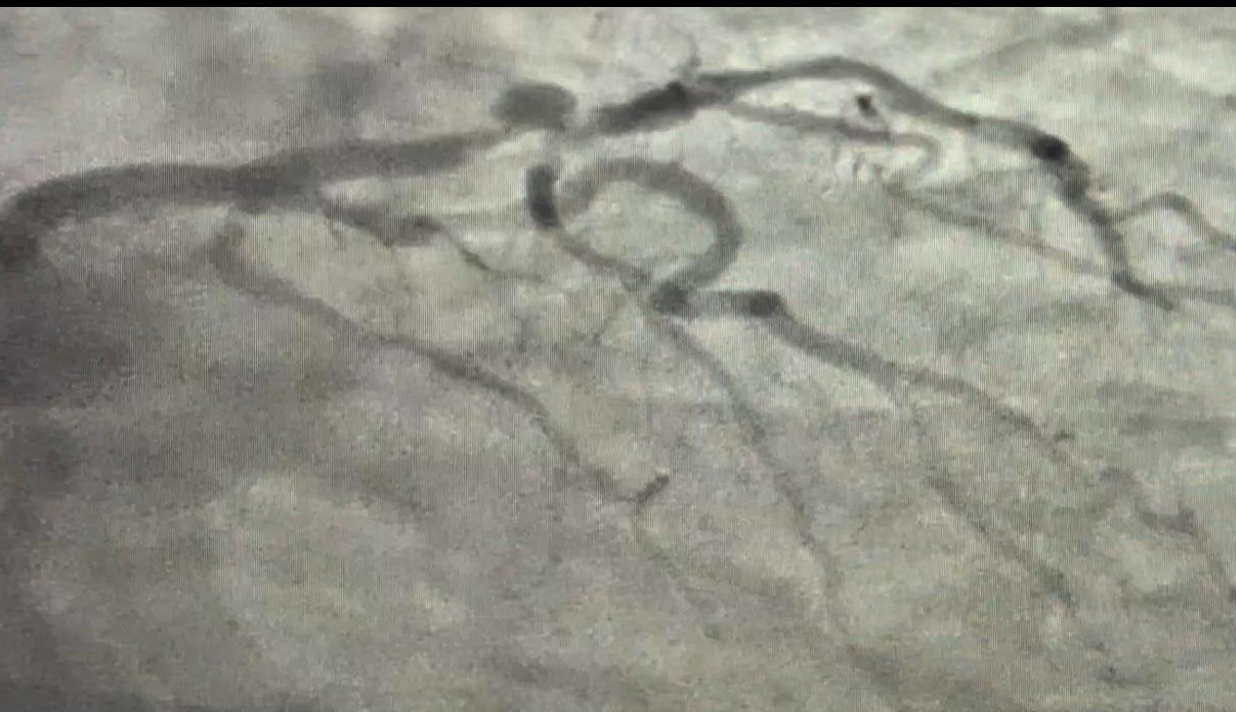


Advanced Imaging Techniques



Decision Making

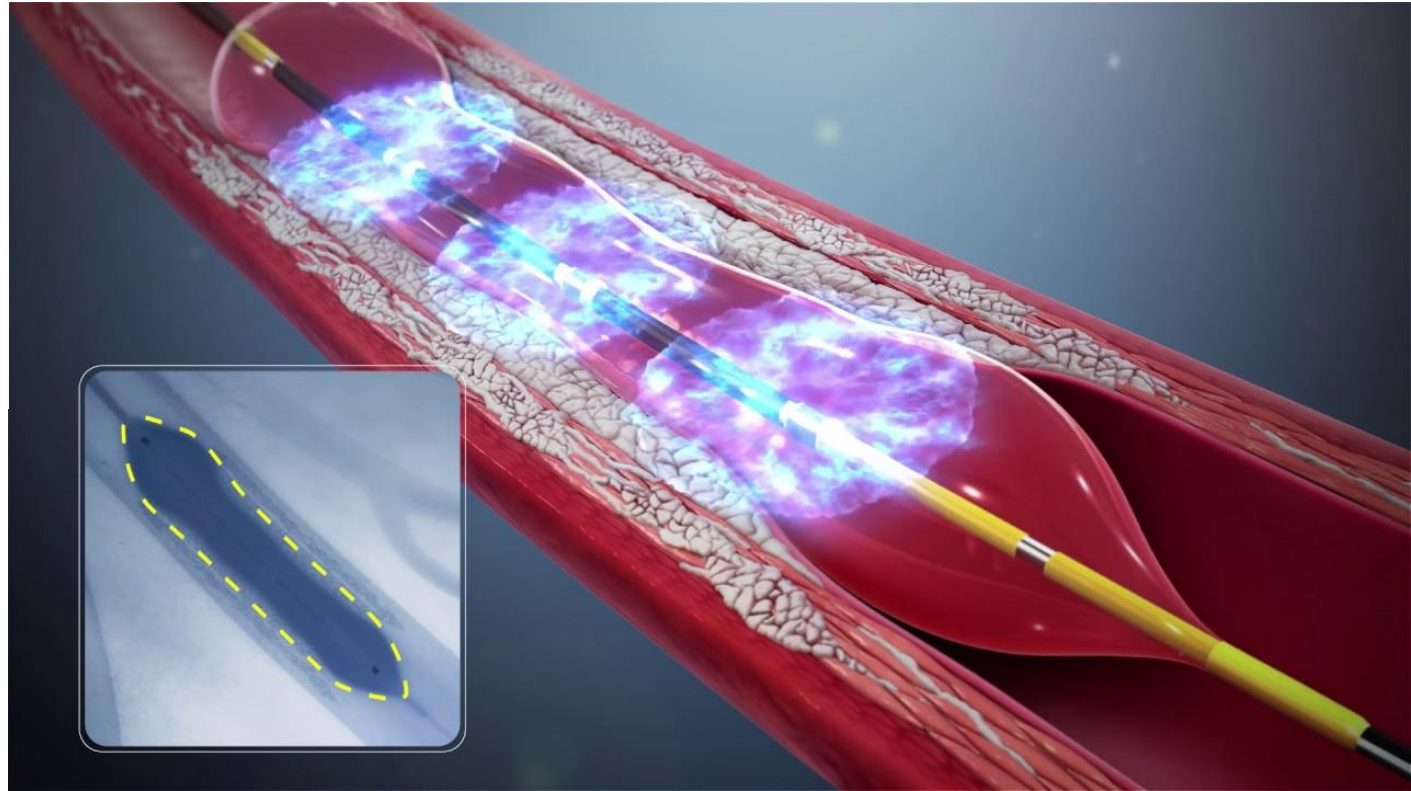


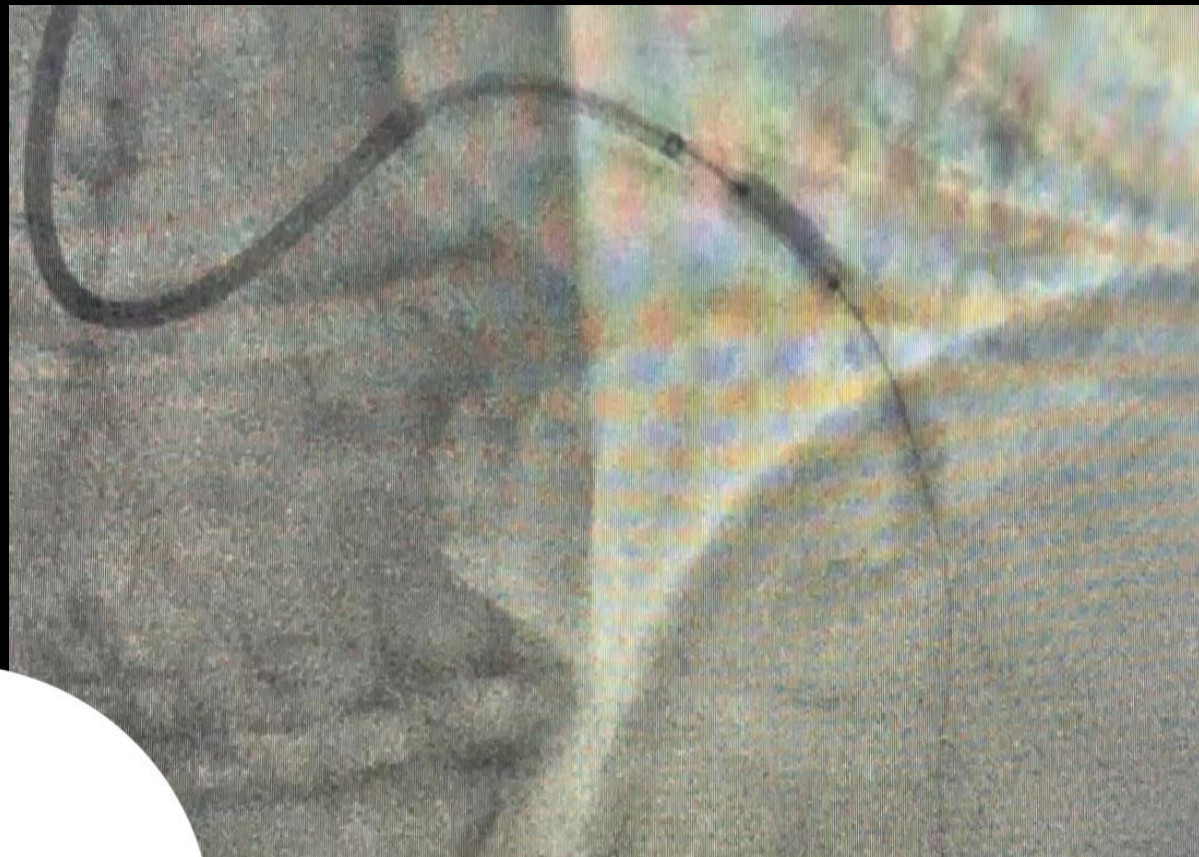


Shockwave Balloons



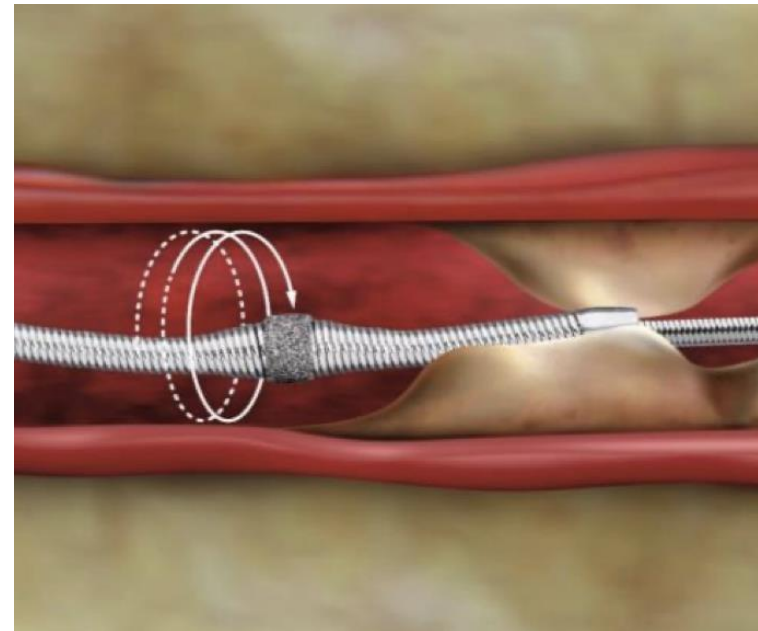
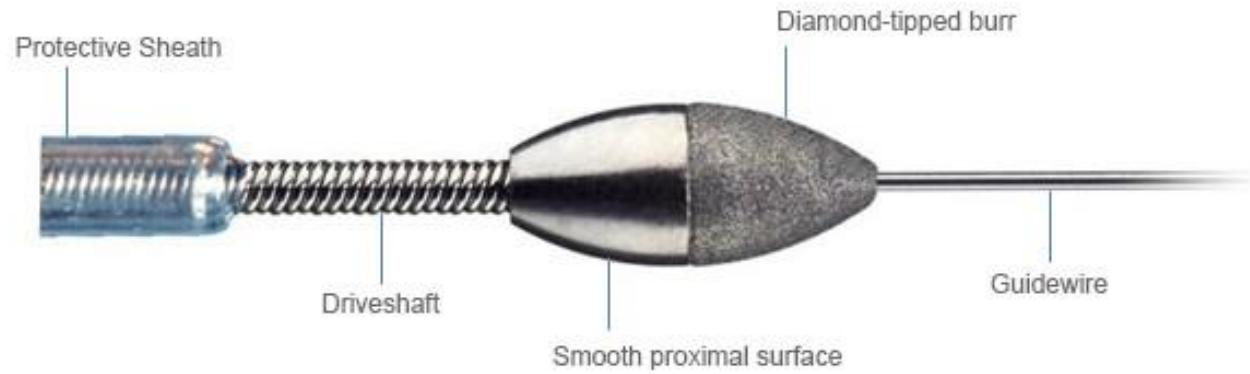
A balloon to deliver sonic pressure waves that can pass through soft arterial tissue to “preferentially disrupt” calcified plaque and optimize stent placement.



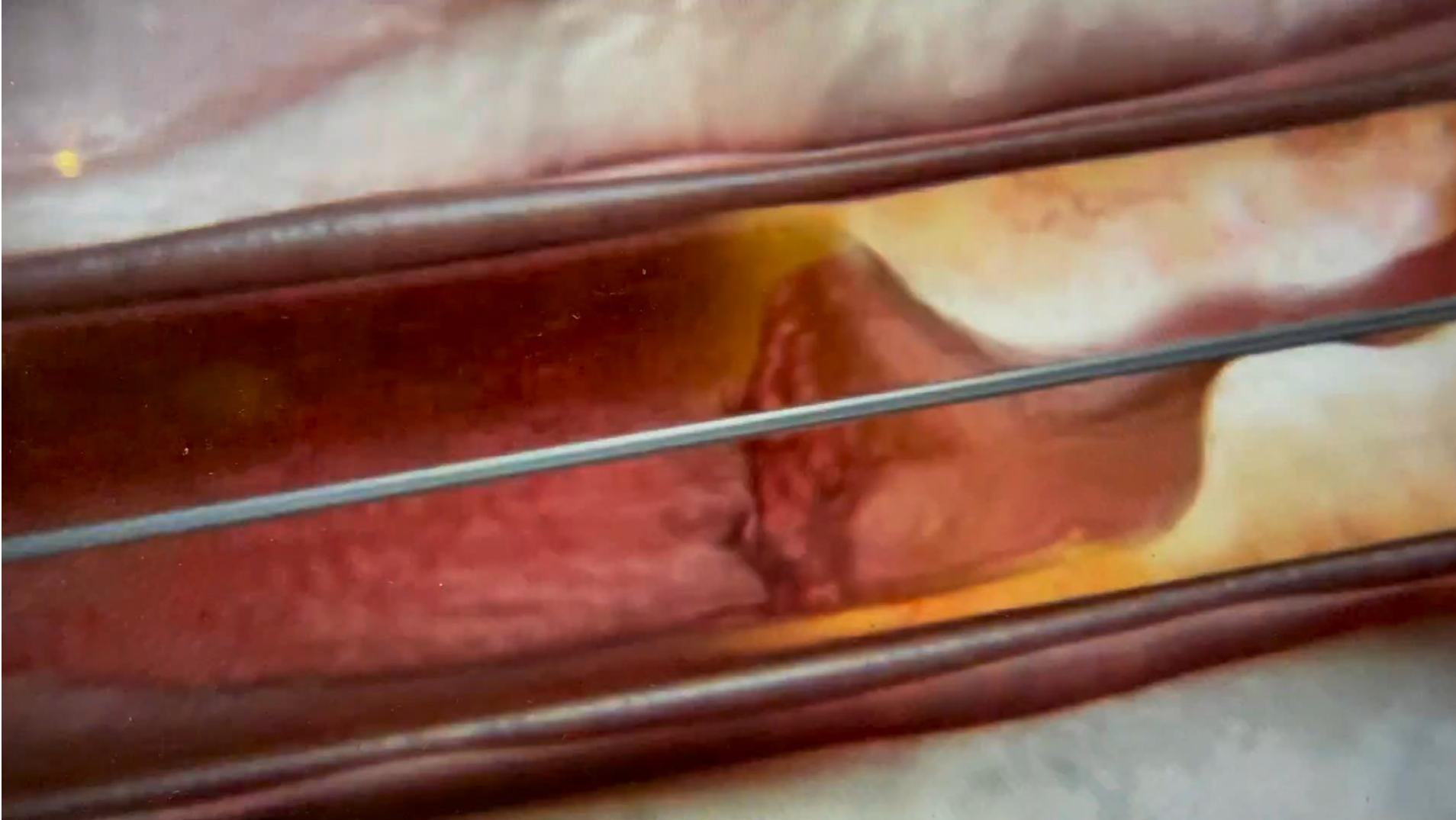




Atherectomy

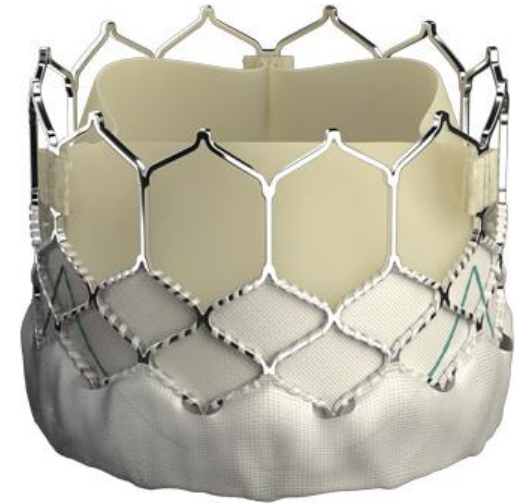
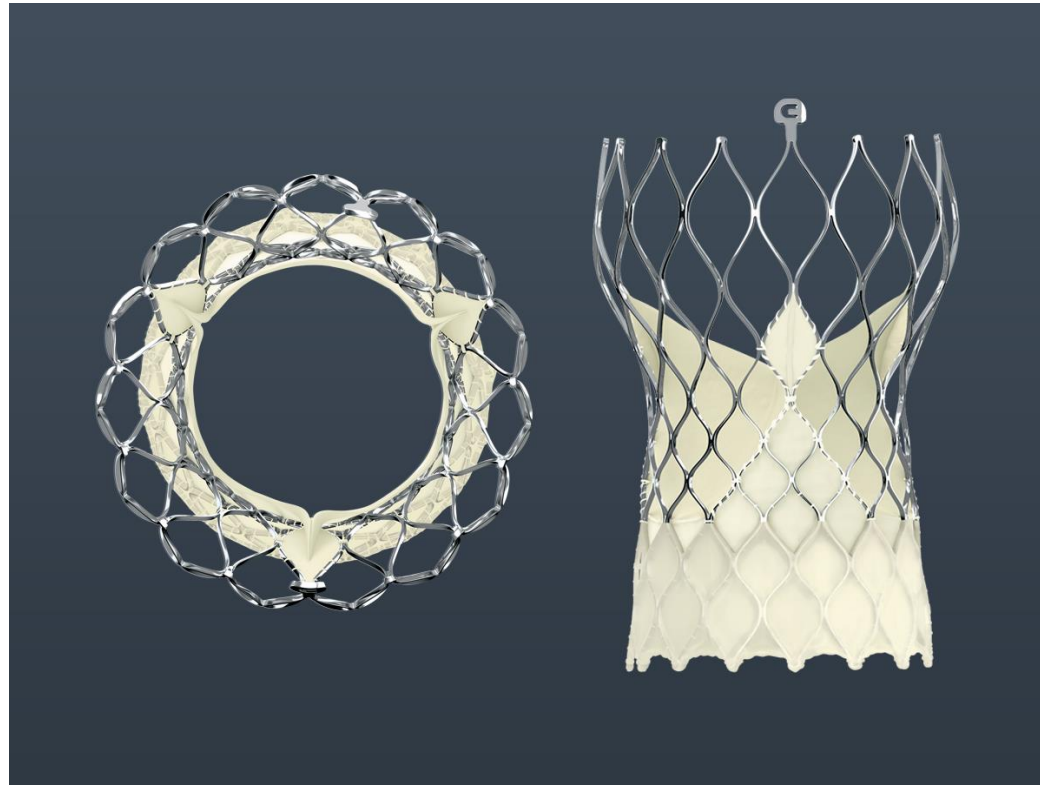
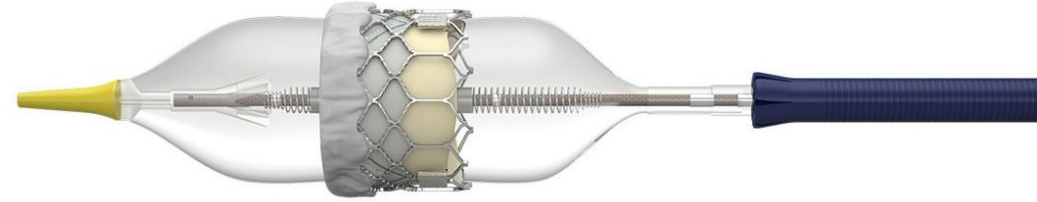


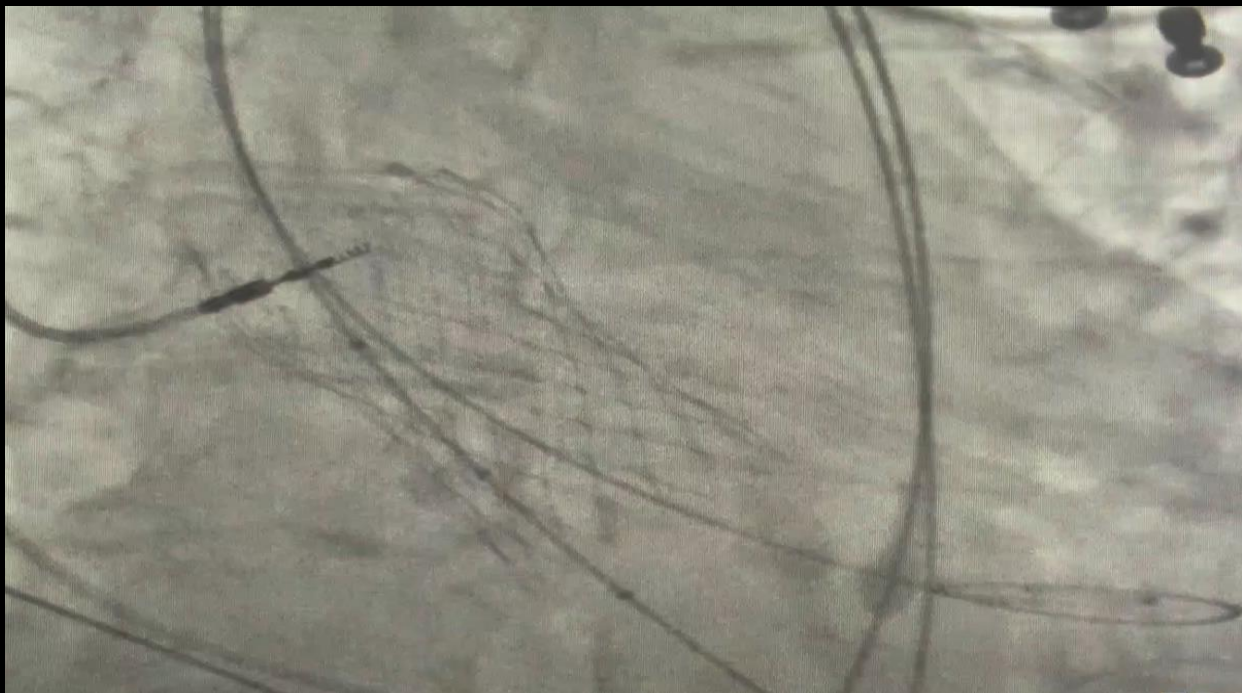
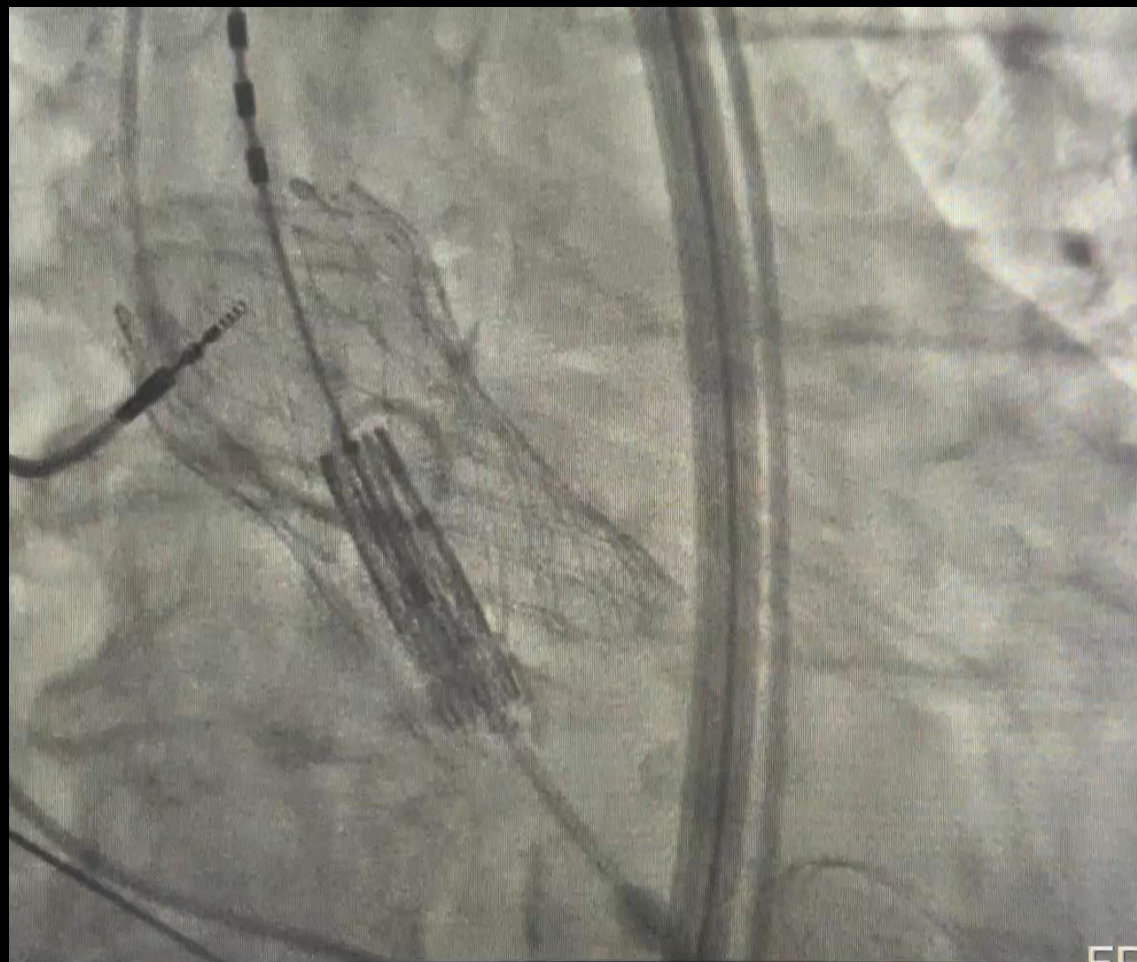
Atherectomy

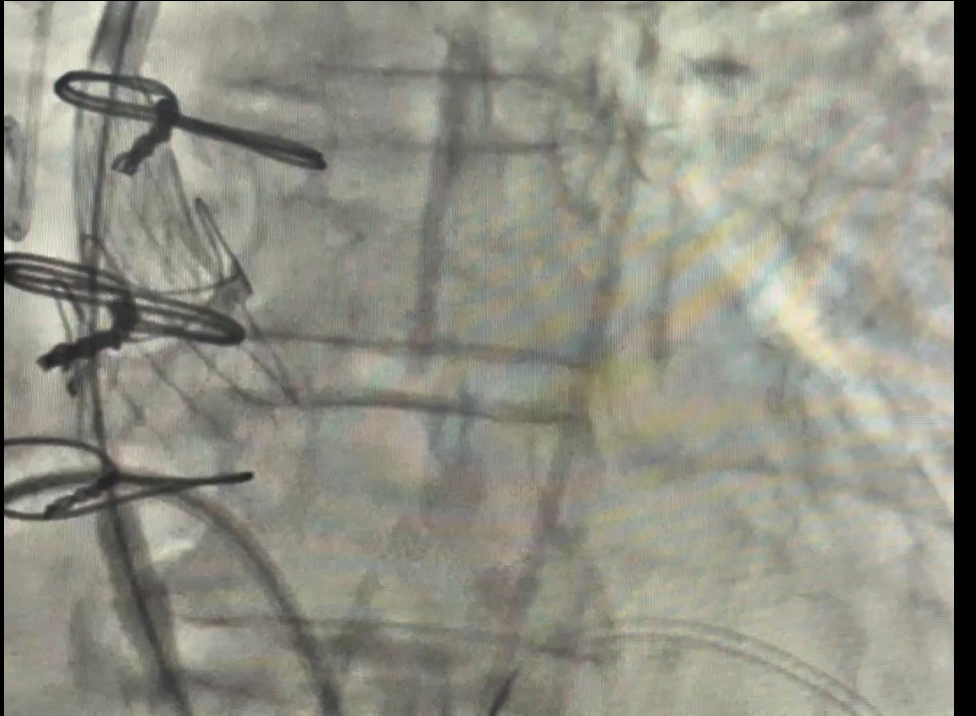
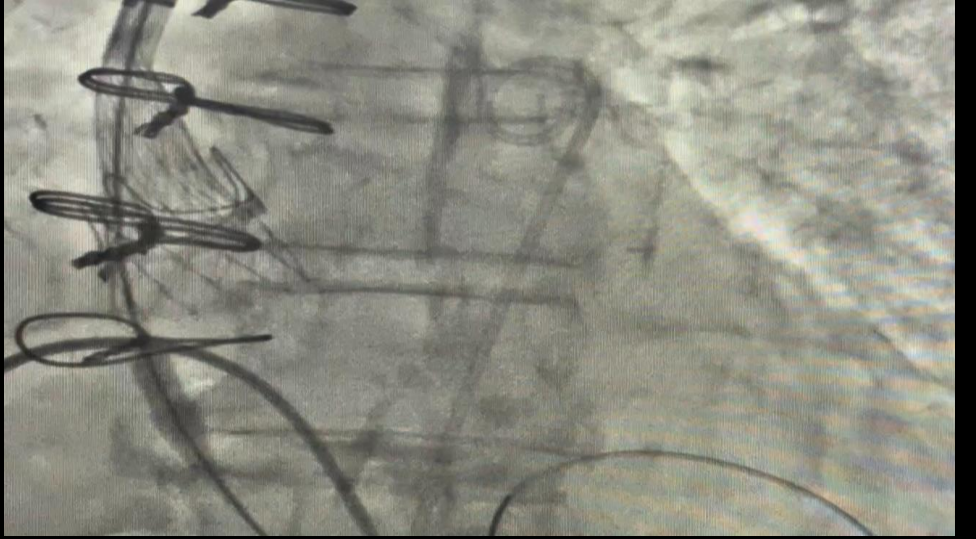
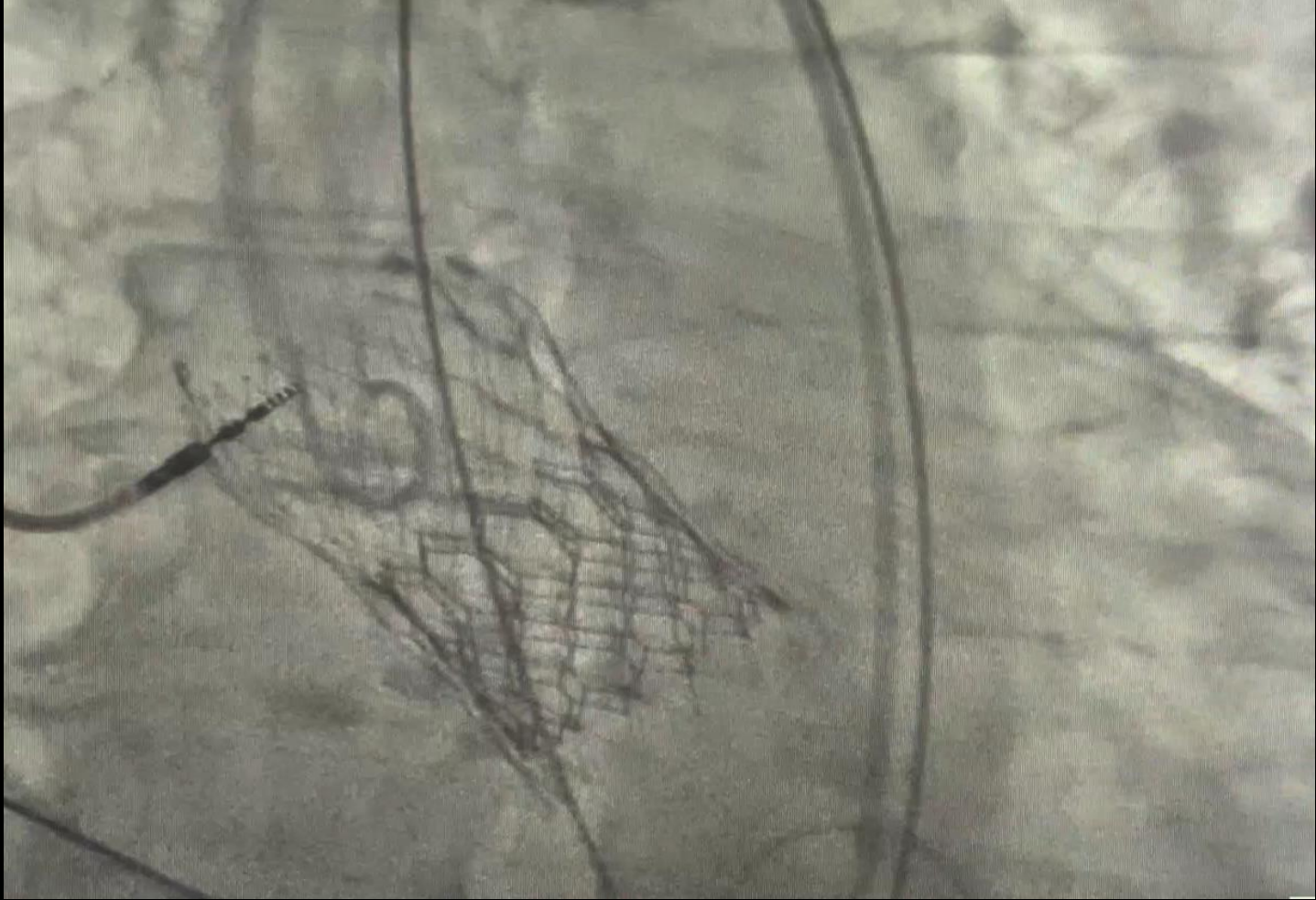


TAVI / Structural Heart Advances

- Valve in valve
- Smaller delivery catheters
- Alternate access
- Other valve options

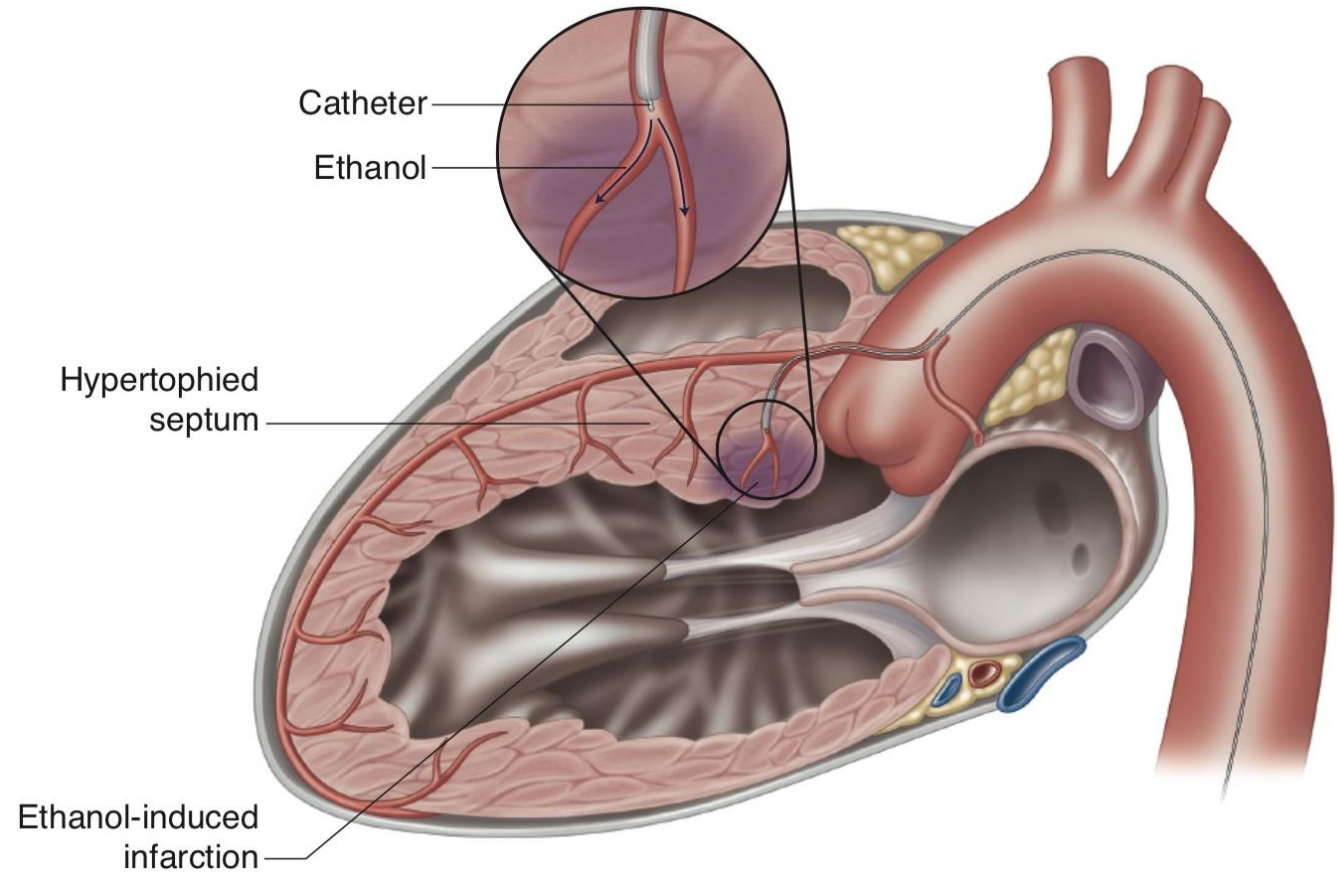




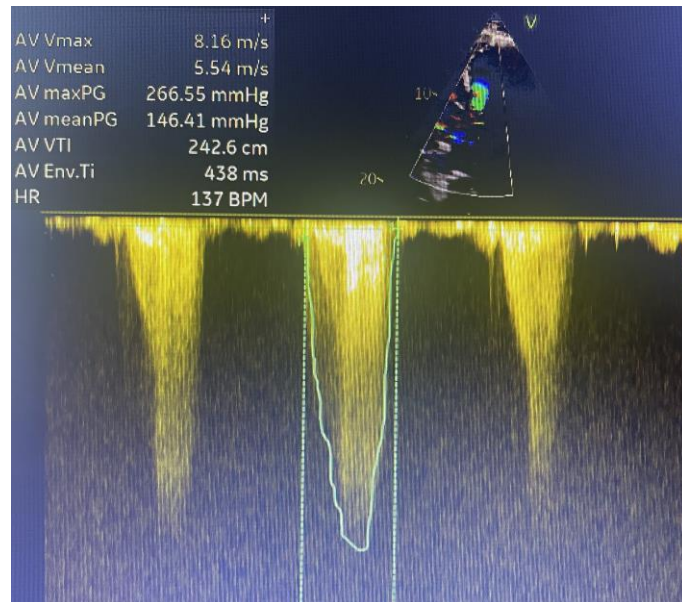
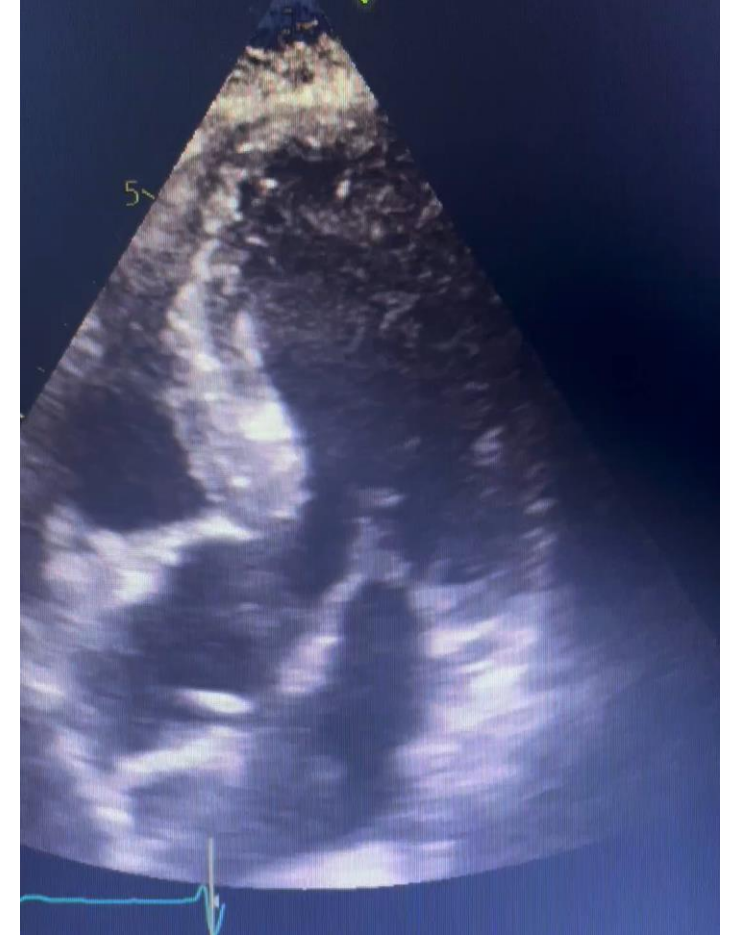
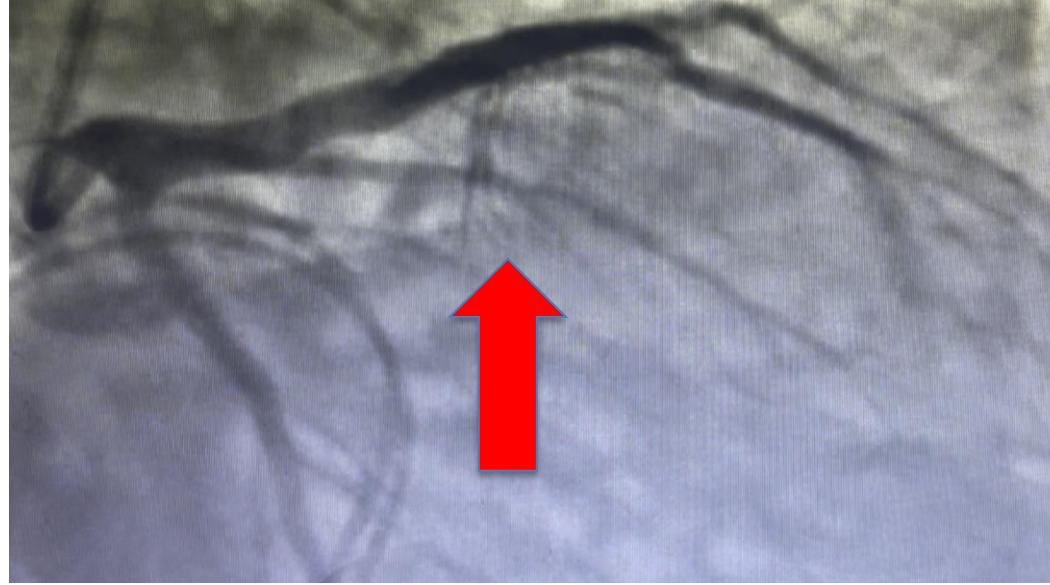


Alcohol Septal Ablation

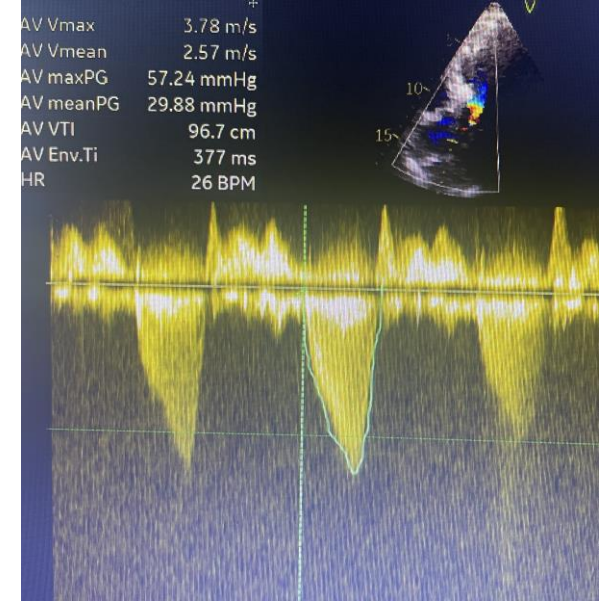
- Hypertrophic cardiomyopathy
- 'Outflow tract' gradient
- Exertional symptoms



Alcohol Septal Ablation



Final Result



Future Expectations

OVERALL:

- Renal denervation
- Bioresorbable stents
- Broader valve therapies
- Continued evolution in non-invasive imaging techniques
- Continued push in preventative approaches

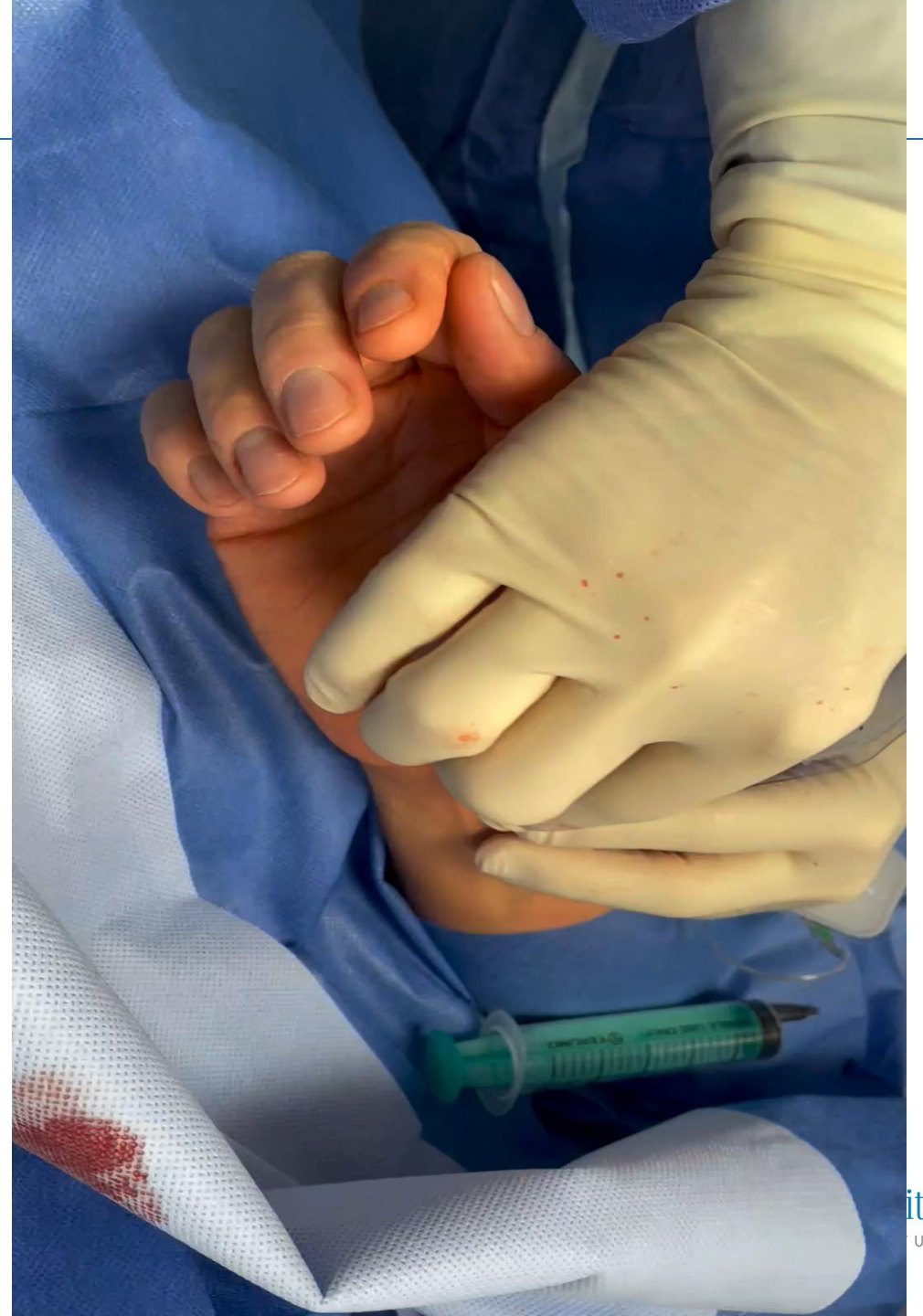
AT BEACON:

- 3rd State of the Art Cath Lab
- BHRI – clinical trials allowing us to provide cutting edge treatments and new developments



Conclusion

TR band vascular closure



THANK YOU