



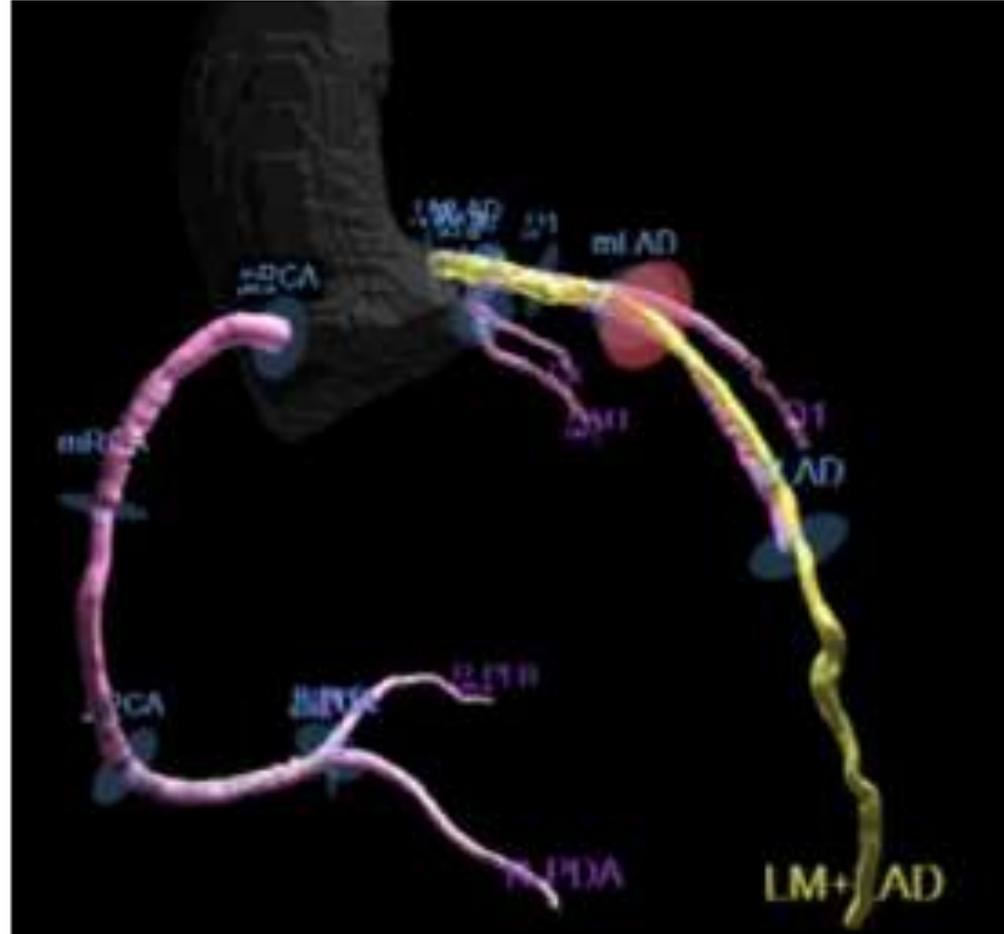
SOUTH METRO FIRE RESCUE WELLNESS PROGRAM CCTA UPDATE

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AGENDA

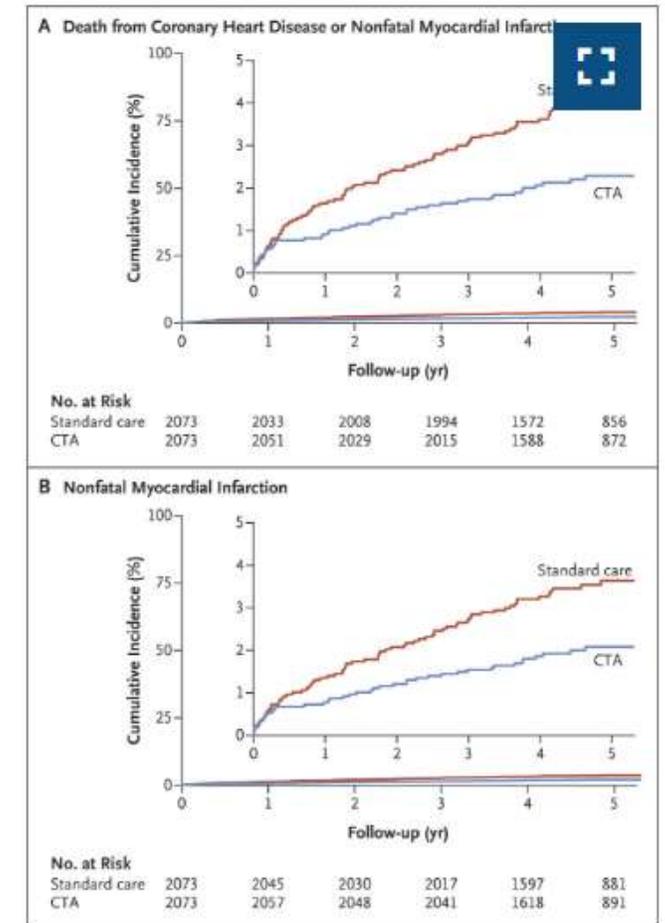
- CCTA Recap
- CCTA Current Numbers
- Case Presentations



RECAP: WHY CCTA?

- Cardiac Arrest is the #1 cause of on-duty death in line members in the fire service nation-wide.
- Early identification of Coronary Artery Disease (CAD) is instrumental in preventing Cardiac Arrest and Cardiac-related deaths.
- The CCTA is proven to be superior in detection CAD* when compared to echocardiograms, EKGs, and stress testing.
 - *Considered Gold Standard of CAD detection (SCOT heart trial)

FIGURE 2



Cumulative Incidence of Death from Coronary Heart Disease or Nonfatal Myocardial Infarction.

OUR NUMBERS SO FAR...

- Plaque burden is staged on a scale of 0-3
- Stages 2 and 3 indicate severe disease that needs intervention (whether medical or procedural)

Total scans so far: **141**

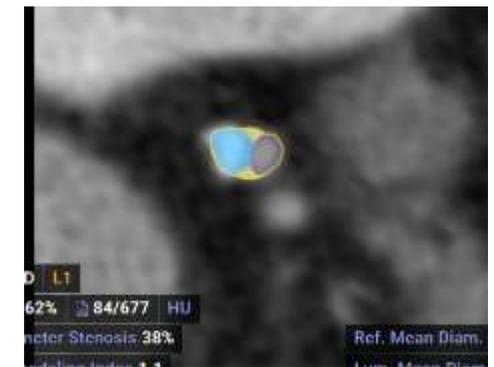
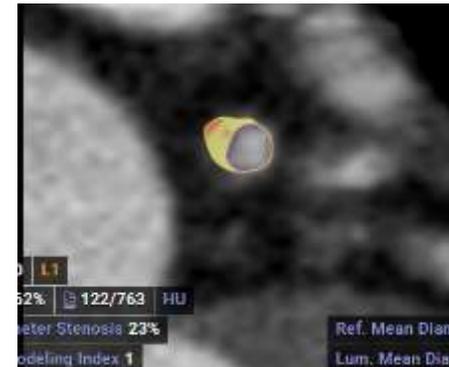
Stage 0 = 9

Stage 1 = 110

Stage 2 = 16

Stage 3 = 6

Stage 2+3 = **22**



93.6% of our line members scanned have CAD

15.6% of our line members scanned have **significant** CAD

REFERRALS AND FOLLOW UP CARE

100 (out of 141) referrals made so far. Out of these:

Intervention: **9%**

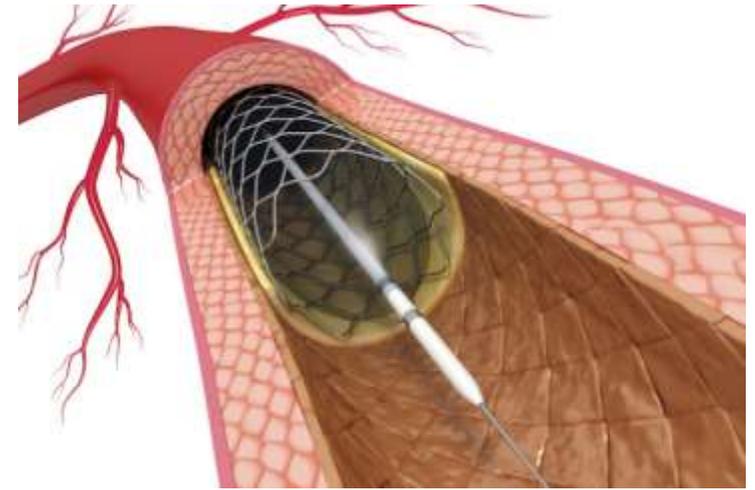
Preventive Cardiology: **37%** (39 referrals, but 2 declined and want to try diet first)

Own Cardiologist: **13%**

Other specialist: **6%**

PCP: **10%**

No referral needed: 27%



This means:

- 73% of all our scanned patients have significant enough of findings to need further follow up!
 - Even if at Stage I
- 17.3% of all **new** specialist (not PCP) referrals require **Interventional Cardiology** follow up



PATIENT CASES

PATIENT #1

Demographics:

37 year old male

+High cholesterol

No HTN, DM or Tob

FH unclear (thought to be negative)

Denied active symptoms, some vague chest pain



CCTA RESULTS

1. Multivessel disease
2. 50% Proximal LAD occlusion



CLINICAL COURSE

Follow-up care:

- Immediate Interventional Cardiology
- Pt placed on high-intensity cholesterol medication with close Cardiology follow up, with possible stent placement in future.
- Return to Line – Day 4
- Rescan 1 year

Dietitian follow-up care:

Discussed immediate lifestyle interventions to reduce burden and lower inflammation. Highlights:

- Pt decreased caffeine intake from ~2g/day (~20 cups of coffee) to 100mg/day (1 cup or 1 shot espresso)
- Pt adhered to dietary change recommendations and reduced body weight by ~20lbs
- Pt decreased personal stress load and increased cooking from home
- Pt started supplement protocol to support additional reduction in cholesterol and support vascular health and reduction of inflammation
- Follow-up ongoing

CCTA RESULTS

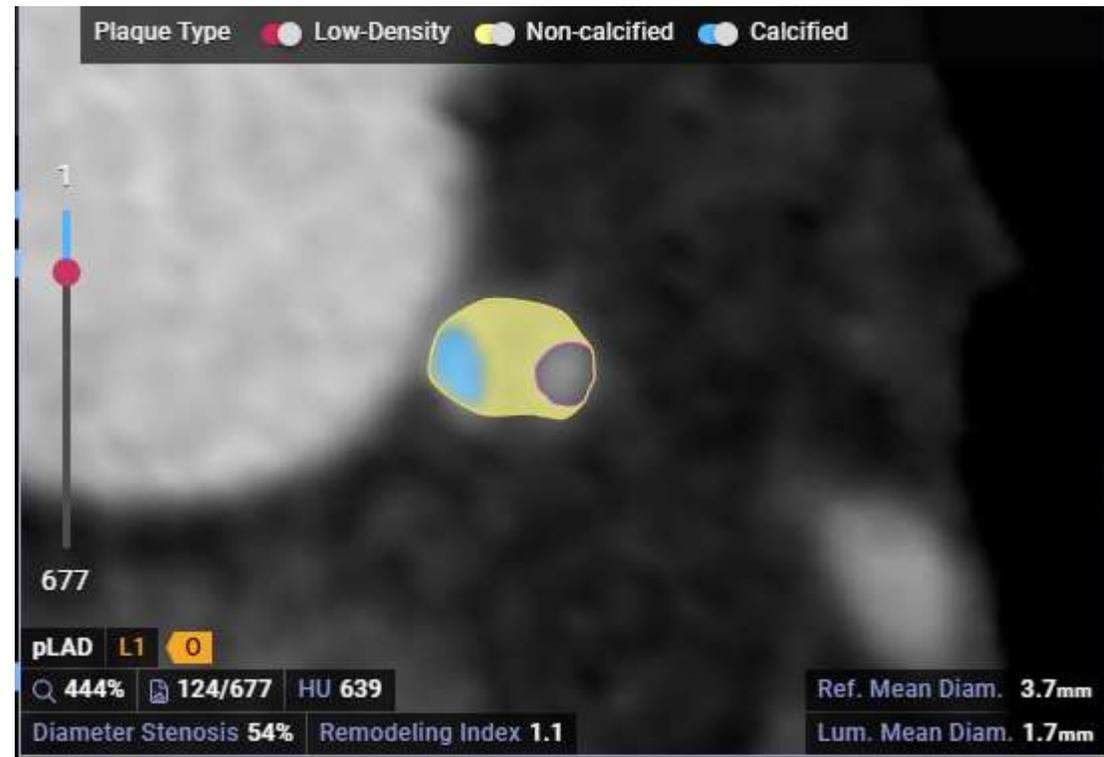
MULTIVESSEL DISEASE

54% PLAD

52% MLAD

41% MRCA

Near **70%** occlusion on review by cardiology





CLINICAL COURSE

Specialist follow-up care:

Stent placement Interventional Cardiology

Medical Treatment

Return to Line (missed 1 set)

Dietitian follow-up care:

- Pt very active lifestyle, discussed supporting with adequate fuel, protein and fiber
- Demonstrated the Mediterranean Dietary Pattern at his Calorie needs with tangible meal and snack ideas
- Discussed specific foods that support vascular health and reduce inflammation
- Provided supplement protocol to support further reduction of cholesterol and inflammation
- Follow-up ongoing

QUESTIONS?

