Westside Medical Imaging

Patient Name: Benjamin Greenfield **M (38)** [redacted] Examination Date: 7/27/2020

Patient Physician: Ramprasad Dandillaya, M.D.

TECHNIQUE:

The patient underwent high-resolution, volume-mode, axial Multi-Slice CT of the heart obtained at 165 millisecond scan times, in conjunction with ECG-gating at mid diastole. Three millimeter slices were obtained and reconstructed at 2 millimeters intervals over a field of view equal to 20 centimeters.

INDICATION:

Screening study for coronary artery calcium.

FINDINGS:

Location	# Lesions	Volume mm^3	Calcium Score	Density
LM	0	0	0	0.0
LAD	4	15	10	1.6
CX	0	0	0	0.0
RCA	1	33	32	1.4
Total	5	48	42	1.4

Table 1.

HEART FINDINGS:

Calcified atherosclerotic plaque structure was identified in the coronary arteries as summarized in **Table 1** by: number of lesions, plaque volume, calcium scores, and density. The results are calculated by each major coronary artery. Risk is assessed by correlation of the total Calcium Score with a calcium score database. The Density is a means to further assess the calcific deposits. A Density less than 1 indicate more dense average calcification. A Density greater than 1 represent less dense average calcification.

The patient shows a coronary artery calcification score of **42**. Minimally dense calcification is seen in the left anterior descending coronary artery. Mildly dense calcification is seen in the right coronary artery.

IMPRESSIONS and RECOMMENDATIONS:

Coronary artery calcification score of **42** consistent with an elevated risk for the future development of obstructive coronary artery disease in a patient in this age group. While this score is not particularly high when compared with patients who currently have obstructive coronary artery disease, the calcification is seen early for a 38 year-old male. The score is >95th percentile for the patient's age and gender.

Recommendations include:

1. **The following lipid goals are recommended: LDL cholesterol near or below 70mg/dl; HDL cholesterol above 40mg/dl; triglycerides below 150mg/dl.**

Continued

2. **Exercise and weight control can be very beneficial to the heart by stabilizing atherosclerotic plaque, controlling blood pressure, lowering triglycerides and raising HDL (good cholesterol). The minimum exercise for healthy people is 30 minutes, 3 to 4 times per week. Optimal exercise is 30 minutes, 6 to 7 times weekly.**

3. **Proper control of blood pressure lowers the risk of cardiovascular disease. A minimum target is below 140/90; a goal of 130/80 should be used for higher risk patients e.g., known cardiovascular disease, diabetes, kidney disease, stroke, and peripheral vascular disease.**

Thank you, Dr. Dandillaya, for the opportunity to provide this examination for your patient.

Norman E. Lepor, M.D., F.A.C.C., F.A.H.A.

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T: Tuesday, July 28, 2020

1. The patient's medical history, symptomatology, and other diagnostic tests should be taken into consideration when interpreting these results.

2. Coronary screening by Non-contrast CT does not measure blood flow. Patients with symptoms of heart disease, significant coronary risk factors, or high calcium scores may require some form of testing for coronary blood flow limitation (such as CT with Contrast or thallium SPECT) in order to provide a complete diagnostic conclusion.