CASE STUDY: Ability to Image High BMI Patients

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43 yo. morbidly obese F with history of HTN, insulin-dependent DM, hyperlipidemia, depression, asthma and former smoker who presented to the clinic with the chief complaints of lower extremity edema, shortness of breath and 20-pound weight gain. She has orthopnea, paroxysmal nocturnal dyspnea, dyspnea on exertion, chest and left arm discomfort. Chest x-ray showed prominent pulmonary vessels. Her ECHO demonstrated a preserved ejection fraction (EF=60%) with collapsible and nondistended IVC. No valve disease. The diastolic function was indeterminate.

Due to the patient's clinical history and increased pre-test probability of coronary heart disease, she was referred for an ischemic evaluation. The cardiology consult service ordered a PET/CT which demonstrated normal LVEF (rest EF=59%, stress EF=61%). No regional wall motion abnormalities. No evidence of myocardial ischemia. No significant coronary artery calcifications are identified. The heart is within upper limits of normal in size. The lung parenchyma is somewhat limited due to breathing motion artifacts, but mild patchy atelectasis is appreciated.



SA, HLA, VLA, Stress / Rest Slices



No obvious lung mass. Overall, this is an unremarkable rest/ stress N-13 Ammonia myocardial perfusion PET/CT scan with normal global function and perfusion without evidence of stress induced myocardial ischemia.

This patient's ischemic evaluation was negative despite morbid obesity.



left: Stress / Rest and Reversibility Extend Ischemia Percentage

below, left: Global and Regional Myocardial Blood Flow and Quality Control Curves

below, right: Global, Regional and Reserve Myocardial Blood Flow Values





OIONETIX ACCESS TO N-13 AMMONIA

HighBMI-3



Eight Frame Stress / Rest Gated Cine. Click on image to link to video.



ED, ES, Motion, Thickening Percentages

Functional Data Including Ejection Fraction

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