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An Unusual Incidental Finding on a Myocardial Perfusion Imaging Stress Test

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ABSTRACT

A 56-year-old female with cardiac risk factors underwent a preoperative myocardial perfusion imaging (MPI) stress test. The MPI stress test resulted in a negative study without evidence for ischemia or scarring and left ventricular function was normal as shown in figure 1. However, on the raw cine image there was an unusual cystic-appearing lesion in the left upper quadrant as shown in figure 2A-C.

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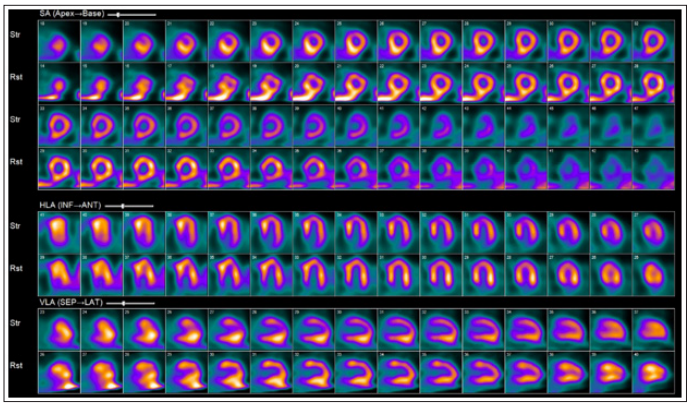

Figure 1 A: 56-year-old female with a history of type II diabetes mellitus, hypertension, and dyslipidemia was seen by her cardiologist for preoperative clearance for an abdominal surgery to evaluate a pelvic mass. Patient's baseline electrocardiogram showed sinus rhythm with a first-degree heart block. Patient underwent myocardial perfusion imaging (MPI) stress test as shown above. There is no evidence for ischemia or scarring and left ventricular function was normal. However, on the raw cine images there was an unusual cystic appearing lesion in the left upper quadrant as shown in figure 2A-C.

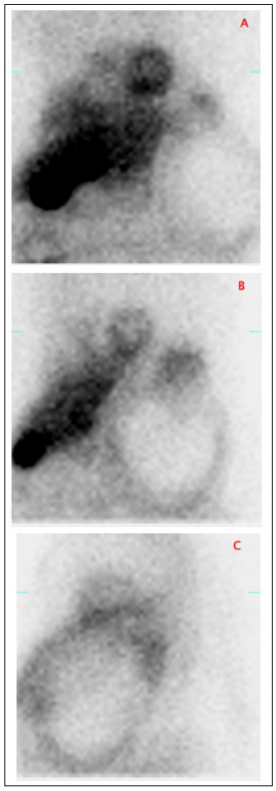

Figure 2 A-C: Raw cines. Images show a fixed unusual cystic appearing lesion in the left upper quadrant. After further chart review, a CT abdomen/pelvis demonstrated the findings below as seen in figure 3a and 3b. Non-cardiac findings (NCF) can be seen in about 1.7 percent of raw projection images in single photon emission computed tomography (SPECT) perfusion imaging.1

One of the more common incidental findings on raw cine images is lung cancer along with thymomas and breast abnormalities.2 To date, there hasn't been a documented case of an endometrial mass seen on raw cine images of stress MPI.

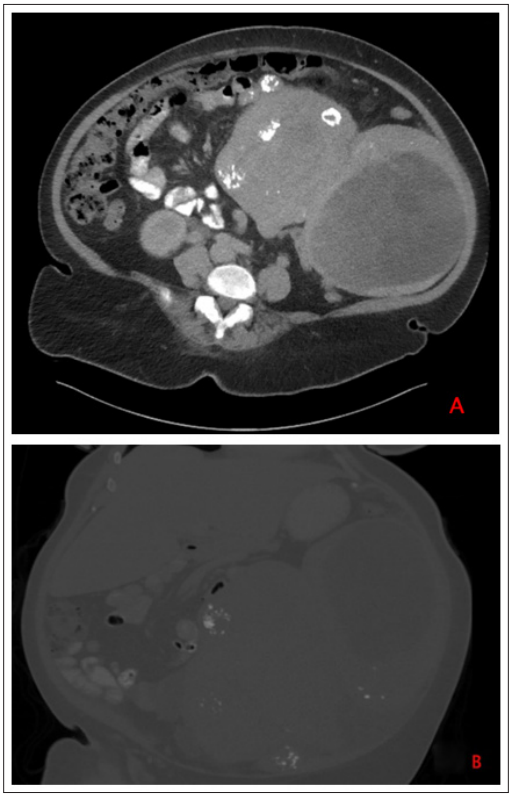

Figure 3: and 3b. There is a large lobulated heterogeneous and partially calcified mass extending from the pelvis into the upper abdomen. It measures 31 x 20 cm in greatest dimensions. The mass appears to extend from the uterus. There is a large complex cystic component of the mass which appears to extend into the left upper abdomen from the dominant uterine mass. There appears to be multiple exophytic nodules projecting from this large mass. Patient subsequently underwent exploratory laparotomy, total abdominal hysterectomy, bilateral salpingo oophorectomy and was diagnosed with endometrioid adenocarcinoma. It's imperative to closely examine the raw cine images and correlate to other imaging modalities when necessary as it can greatly affect patient outcomes.

Disclosure

The authors certify that there are no affiliations with or involvement in any organization or entity with or without financial interest in the subject matter or materials discussed in this manuscript.

References

1. Williams KA, Hill KA, Sheridan CM (2003) Noncardiac findings on dual-isotope myocardial perfusion SPECT. J Nucl Cardiol 10: 395-402.
2. Muzaffar R, Raslan O, Ahmed F, Goldfarb L, Sterkel B (2017) Osman MM. Incidental Findings on Myocardial Perfusion SPECT Images. J Nucl Med Technol 45: 175-180.

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