



30th Annual Scientific Session and Exhibition of the
American Society of Nuclear Cardiology

Accurate Quantitation of Cardiac Amyloidosis by ^{124}I -Evuzamitide Compared to Extracellular Volume

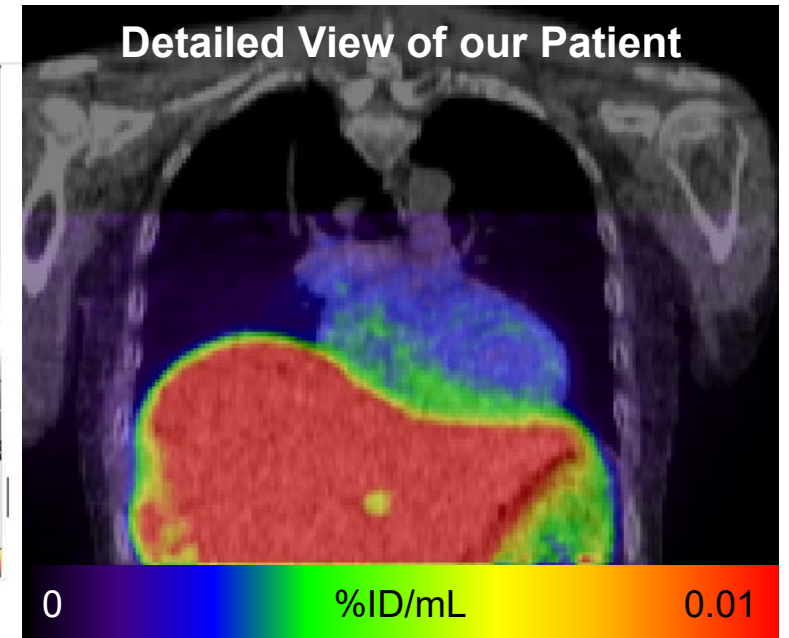
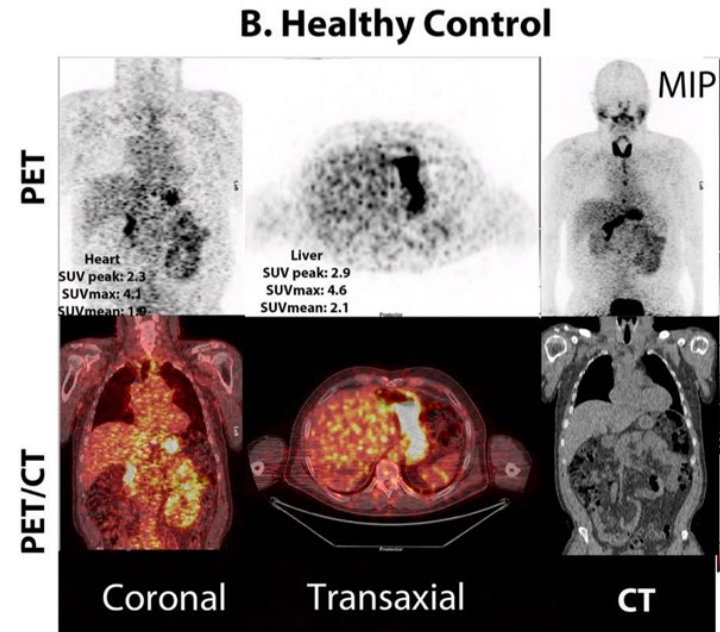
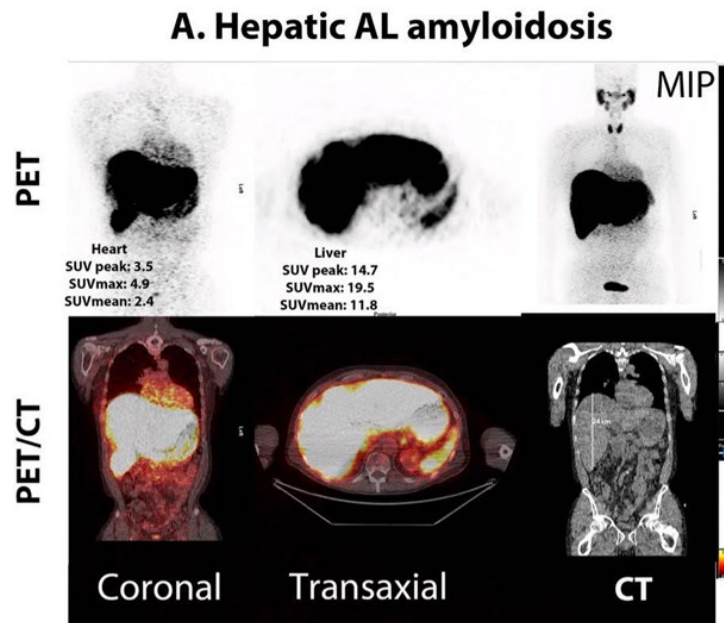
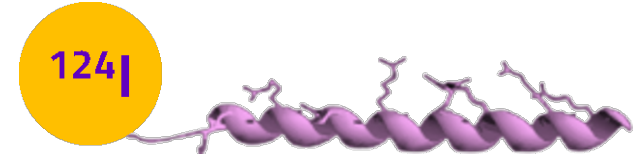
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Case Presentation

- 62-year-old man: Exertional dyspnea and chest pain, hepatomegaly
- Laboratory values:
 - Hemoglobin 6.8 g/L
 - Alkaline phosphatase 887 U/L, then 1347 U/L
 - γ -GT 820 U/L
 - Bilirubin Normal, then up to 8.3 mg/dL (mostly direct)
 - NT-proBNP Normal, then 2569 pg/mL
 - 24h urine protein 2.2 g
 - Serum electrophoresis M-spike IgG λ + high λ free light chains
- Bone marrow biopsy: Multiple myeloma IgG λ with 80% plasmacytes
- Skin biopsy with MS: Light chain λ amyloidosis (AL)
- Echocardiography: OK except grade 2 DD, speckled myocardium (?)
- Cardiac MRI: No LGE, high T1, extracellular volume (ECV) 48%

^{124}I -Evuzamitide PET/CT



Teaching Points

- ^{124}I -evuzamitide PET/CT can detect and quantify organ involvement in AL amyloidosis (e.g., heart, liver, spleen).
- ECV from MRI can be inaccurate with anemia, and includes non-amyloid components of the extracellular matrix.
- ^{124}I -evuzamitide has the unique ability to detect liver amyloid, which may avoid biopsy, unlike other amyloid PET radiotracers.