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BACK TO THE BASICS: ALL THAT GLITTERS IS NOT SARCOIDOSIS

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☆ **Complex Clinical Cases**

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Poster Contributions
For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461
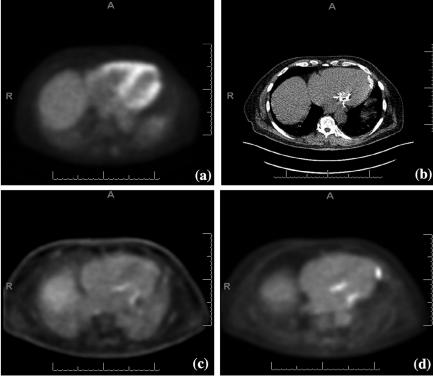
Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Multimodality Imaging
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Background: 18-F-fluorodeoxyglucose positron emission tomography (FDG-PET) plays an important role in the diagnosis and management of cardiac sarcoidosis (CS). False positive study can be seen in conditions that increase myocardial FDG uptake or due to artifacts.

Case: An 83-year-old male with mitral regurgitation who underwent Tendyne Transmitral Valve Implantation was referred for FDG-PET due to bilateral hilar lymphadenopathy on recent CT. FDG-PET showed moderate area of severely decreased perfusion involving the distal lateral wall and apical wall at rest. There was increased FDG uptake in the distal lateral and apical wall on the attenuation corrected images (AC) that was not present on the non-AC images.

Decision-making: FDG accumulation in myocardial tissue is only indicative of increased cellular metabolic activity and is not specific for CS. Several reports of non-specific FDG uptake around prosthetic cardiac valves and devices have been reported. Although the uptake pattern in this case was consistent with active CS, it became apparent that this was an artifact due to the Tendyne prosthesis after the CT data of the Tendyne valve location was co-registered with the FDG data.

(a) Attenuation corrected image with RB82 perfusion (b) Non-diagnostic CT (c) Non-Attenuation corrected image with FDG (d) Attenuation corrected image with FDG

Conclusion: FDG-PET is frequently used in diagnosing active CS and for disease monitoring. When interpreting the images, taking into consideration the clinical context, patient's history and supporting data is vital to avoid misdiagnosis. Thus, going to basics of integrating all data cannot be over-emphasized.