DOES TRANSIENT ISCHEMIC DILATATION IN THE SETTING OF A NORMAL PHARMACOLOGIC NUCLEAR SCAN REALLY MATTER?

Poster Contributions
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Background: Although Transient Ischemic Dilatation (TID) noted on SPECT perfusion images has been a well established marker of significant CAD its clinical significance in presence of otherwise NORMAL SPECT MPI has been recently called in question. We used our laboratory internally validated TID value for significant CAD (TID+ve = >=1.13 for Regadenoson (REG) SPECT MPI) to study its prognostic significance.

Methods: REG SPECT MPI data from 1,167 consecutive patients was obtained with upto 37 months followup. Demographics and clinical parameters were compared by 2 TID groups (TID+ve >= 1.13 ; SDS 0( Grp 1)or TID -ve < 1.13 SDS 0 ( Grp 2 ) in the subset with normal SPECT MPI (n=790). Survival curves were generated for all cause death , cardiac death, MI and heart failure.

Results: Of the 790 patients Grp 1 n=116 and Grp 2 n=674. There was no significant differences in baseline demographics. All cause death occurred in 45 patients (7%) with no TID and 12 patients with TID (10%); p-value 0.158. Cardiac death occurred in 9 patients without TID (1%) and 3 patients with TID (3%); p-value 0.309. Overall any MACE occurred in 77 patients without TID (11%) and 15 patients with TID (13%); 0.640. Probability of survival is shown in Graph 1.

Conclusion: This study definitively demonstrates that TID alone in the setting of a normal REG SPECT MPI does not predict increased MACE and clinicians should use caution in calling scans abnormal just based on TID alone.