

## **The Role of Performing Prone Stress in Myocardial Perfusion Scintigraphy**

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**Background:** One of the major limitations of myocardial scintigraphy is soft tissue attenuation, which could be interpreted as a true perfusion defects, particularly diaphragmatic and bowel attenuation of the inferior wall.

**Objective:** The aim of this study was to evaluate the role of adding prone scan to the stress myocardial scintigraphy.

**Setting:** Department of Radiology, Nuclear Medicine Section, King Faisal Specialist Hospital and Research Center.

**Design:** Retrospective study.

**Method:** Eighty-eight patients with coronary artery disease had myocardial perfusion scan and were reported with and without a prone scan during stress study. All patients in this study had a diagnostic coronary angiogram.

Patients who had coronary angiogram within one month after the diagnostic cardiac scan were included. Patients who have been admitted to the hospital between the two procedures were excluded.

**Result:** Prone scan had improved the sensitivity (SN), specificity (SP), positive and negative predictive value (PPV, NPV) of the myocardial perfusion scintigraphy studies. Prone scan showed that SN, SP, PPV and NPV were, 91.7%, 70%, 78.6% and 87.5% compared to supine scan, which were 76.6%, 53.6%, 65.4% and 66.7%.

**Conclusion:** In this study, we have found that the sensitivity and specificity had improved after the addition of prone stress scan in myocardial perfusion studies.

Prone scan had helped in differentiating perfusion defects from attenuation artifacts, leading to improvement of detecting the true perfusion defects.

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