Stress Echo as an initial diagnostic tool and its socio-economic perspective

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Aim: Exercise-stress electrocardiogram (ECG) is initially recommended for the diagnosis of coronary artery disease, but its value has been questioned in the past because of suboptimal diagnostic accuracy. Stress echocardiography has an advantage in sensitivity and specificity. Stress Echo is a versatile test that examines the heart in action. Over the past three decades, it has emerged as one of the leading modalities for the evaluation of coronary artery disease. It is the most widely disseminated and inexpensive technique for non-invasive imaging of the heart. It is patient friendly because it is rapidly performed, and is highly versatile, being usable in a variety of environments.

Methods & Results: An electronic questionnaire was designed to assess the efficacy of Stress Echo (SE) from January 2017 to October 2017 at Glan Clwyd Hospital. 50 patients had SE. 62% of SE referrals were made to the department as an initial diagnostic tool to look for a myocardial ischemia and 24% of referrals were made to aid the management of patients with known ischaemic heart disease. Rest of the 14% of referrals were for other reasons. SE results were reported 20% positive and 80% negative. Out of the positive SE patients, 70% had further invasive coronary angiography and had significant CAD confirmed by a coronary angiogram. 46% of total patients had changes in medications following SE. The changes were stopping antianginal agents and unnecessary antiplatelets, especially in the young cohort of patients. Those patients with a significant CAD who did not fulfil the criteria of revascularization had optimization of antianginal medications.

Conclusion: Stress Echo is cost-effective without adverse effect on patients and can be used safely as the initial diagnostic tool to diagnose coronary artery disease. SE should be preferred due to its lower cost, wider availability and for its radiation free nature.

Recent Publications:


Biography

Muhammad Tahir & has a special interest in Echocardiography and Non-invasive investigations for diagnosis of IHD especially functional assessment of Myocardium. Dr. Muhammad Tahir has been in cardiology for more than 14 years and works as speciality doctor in Glan Clwyd Hospital, Wales, United Kingdom.