Trans myocardial laser revascularization

Roshandel M; MSc¹

Abstract

**Background:** End stage coronary heart disease is a manifestation of chronic ischemic heart disease. It is characterized by a reduction in left ventricular function and intractable, untreatable angina pectoris. Not only is coronary disease a major cause of death in the western world, it is also a leading cause of severe disability for millions of people. The characteristic symptoms of angina, dyspnea and fatigue degrade the quality of life for suffers. Physical activity is limited, independence is reducing and self-esteem is lost. These results in frequent hospital admission and death may eventually occur from recurrent infarctions or pump failure.

Despite advances made in coronary revascularization, there are a small but significant number of patients for whom conventional treatments are not suitable or appropriate. Trans myocardial revascularization (TMR) a more recent from of such patients who have few other options. Thus renewed interest has arisen in this method of indirect revascularization which was abandoned 30 years ago due to the success of coronary artery by pass grafting (CABG)

**Materials and methods:** For this review article we have searched through internet by the following keywords: Trans myocardial revascularization, laser.

**Results:** Although the mechanism of TMR is not fully understood, clinical benefits have been demonstrated. These in clued a reduction in angina, an improvement in myocardial perfusion and decrease in hospital readmission rate.

**Conclusions:** Although TMLR clinical trials have established it as a low-risk therapy for patients with end-stage ischemic CHD, it has been more effective in improving quality of life for these patients than in improving survival.

¹- Instructor, Army University of medical sciences, faculty of nursing, department of health.