

EFFECT OF THERAPEUTIC INTERVENTIONS ON ECHOCARDIOGRAPHIC EPICARDIAL ADIPOSE TISSUE THICKNESS: A REVIEW

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ABSTRACT

Increased Echocardiographic Epicardial Adipose Tissue has been identified as a major risk factor for atherosclerosis. Echocardiographic measurement of Epicardial Adipose Tissue has been recognized as a simple, reliable and cost effective method to estimate visceral fat and future risk for coronary events. Echocardiographic Epicardial Adipose Tissue Thickness is also considered as an effective therapeutic target. The effect of pharmacological, surgical and life style interventions on Echocardiographic Epicardial Adipose Tissue Thickness was reviewed in this study. The databases searched include Medline, PROQUEST and CINAHL. Seven studies have been selected which had at least one arm that was a surgical, pharmacological, dietary, and exercise intervention. The articles published in English through 2013 were reviewed. The weight loss induced by all these interventions was associated with a reduction of Echocardiographic Epicardial Adipose Tissue, although the consistency and magnitude of this effect has not been well characterized. There is limited research on the dose-response relationship in response to diet induced and exercise induced weight loss. Further research is required to study the clinical application of Echocardiographic Epicardial Adipose Tissue measurements before and after therapy in prevention and management of cardiovascular and metabolic disorders

KEYWORDS: Epicardial Adipose Tissue Thickness, Echocardiography, Therapeutic interventions, Review, Visceral fat