

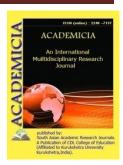
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## THICKNESS OF EPICARDIAL ADIPOSE TISSUE AS A PREDICTOR OF CARDIOVASCULAR RISK

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## **ABSTRACT**

Epicardial fat is one of the most discussed and unexplored risk factor for cardiovascular disease. Structure of epicardial adipose tissue, it's functions and pathophysiological processes are observed. It is considered epicardial fat to increase cardiovascular risk. Currently, there is no standardized methodology for measuring the thickness of the epicardial fat. As the most accessible method, the method of transthoracic echocardiography is considered and described. The researchers suggested that the absence of the fascia separating the adventitia of the coronary arteries from the ECF may contribute to atherosclerotic lesions of the coronary arteries to a greater extent due to the paracrine effect of the ECF itself than from the processes of the systemic inflammatory process. At the same time, these studies are characterized by laboriousness, the need for specially trained personnel, high cost and, in the case of MSCT, radiation exposure for the patient, which significantly limits the possibility of their widespread use in clinical practice to assess the severity of epicardial obesity. Sacks et al. Pioglitazone therapy was associated with a lower expression of pro-inflammatory genes, in particular interleukin-1b, in the ECF in patients with type 2 diabetes (DM 2) and coronary artery disease. There is evidence that the volume and thickness of the EFT are associated with the degree and severity of metabolic syndrome and IHD, therefore, the measurement of the EFT thickness can be used as a prognostic marker of cardiometabolic diseases.

**KEYWORDS:** Epicardial Fat, Cardiovascular Disease, Cardiovascular Risk, Echocardiography.



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## LITERATURE

- **1.** Sacks H.S., Fain J.N. Human epicardialadipose tissue: a review. Am. Heart J. 2007; 153: 907–917. DOI: 10.1016/j. ahj.2007.03.019.
- **2.** Iacobellis G., Willens H.J. Echocardiographic epicardial fat: a review of research and clinical applications. J. Am. Soc. Echocardiogr. 200
- **3.** 3. Baritdinova M.N. Orziqulova Sh.A. THE PREVALENCE OF ABDOMINAL OBESITY AMONG THE POPULATION AS THE MAIN CRITERION OF THE METABOLIC SYNDROME. ISSN 2249-7137 Vol. 10, Issue 11, November 2020 Impact Factor: SJIF 2020=7.13
- **4.** Orziqulova Shaxlo. CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND THE METABOLIC SYNDROME: THE STATE OF THE PROBLEM. DOI: 10.5958/2249-7137.2021.01615.3. ISSN: 2249-7137 Vol. 11, Issue 6, June, 2021 Impact Factor: SJIF 2021 = 7.492
- **5.** Pezeshkian M, Noori M, Najjarpour-Jabbari H et al. Fatty acid composition of epicardial and subcutaneous human adipose tissue. Metab Syndr Relat Disord 2009; 7 (2): 125–31.
- **6.** Prati F, Arbustini E, Labellarte A et al. Eccentric atherosclerotic plaques with positive remodelling have a pericardial distribution: a permissive role of epicardial fat? Eur Heart J 2003; 24: 329–36.
- **7.** Berg AH, Scherer PE. Adipose tissue, inflammation, and cardiovascular disease. Circ Res 2005; 96 (9): 939–49.
- **8.** Mazurek T, Zhang L, Zalewski A et al. Human epicardial adipose tissue is a source of inflammatory mediators. Circulation 2003; 108 (20): 2460–6.
- **9.** Ito T, Nasu K, Terashima M et al. The impact of epicardial fat volume on coronary plaque vulnerability: insight from optical coherence tomography analysis. Eur Heart J Cardiovasc Imaging 2012; 13 (5): 408–
- **10.** Sacks HS, Fain JN et al. Uncoupling protein-1 and related messenger ribonucleic acids in human epicardial and other adipose tissues: epicardial fat functioning as brown fat. J Clin Endocrinol Metab 2009; 94 (9): 3611–5.
- **11.** KI Juraeva, BK Badridinova, BS Kadirov, MA Majidova, KS Yakhyaeva, Frequency of meeting the main components of the metabolic syndrome during disturbance of different phases of glycemic curve...ACADEMICIA: An International Multidisciplinary Research Journal 9 (1), 80-85
- **12.** Х.Ш Яхъяева. Сахарный диабет 2-го типа у детей и подростков бухарской области. //Биология и интегративная медицина //2021.—P. 139-145.