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# Factors Associated with Aortic Stiffness Index, Aortic Velocity Propagation, and Epicardial Fat Thickness in Pregnancy

## Gebelik Sayısının Aort Sertlik İndeksi, Aort Hızı Yayılımı ve Epikardiyal Yağ Kalınlığı Üzerine Etkisi

**LETTER TO THE EDITOR**
EDİTÖRE MEKTUP

I found the study titled "The Effect of Number of Pregnancies on Aortic Stiffness Index, Aortic Velocity Propagation, and Epicardial Fat Thickness" by Şaylık et al.,[1] published in the *Archives of the Turkish Society of Cardiology*, to be highly interesting. We would like to highlight several important aspects of this well-written study.

The authors indicated that multiparity was independently associated with aortic stiffness (ASI), aortic velocity propagation (AVP), and epicardial fat thickness (EPT). This cross-sectional study is noteworthy and may have valuable implications for clinical practice. Subclinical hypothyroidism (SCH) is common during pregnancy, occurring more frequently than overt hypothyroidism, with an incidence ranging from 15% to 28% in iodine-sufficient regions.[2] Evsen et al.[3] demonstrated that aortic stiffness is impaired in patients with subclinical hypothyroidism, even after adjusting for other cardiovascular risk factors. Additionally, epicardial fat thickness (EFT) has been shown to correlate with cardiovascular risk in individuals with SCH.[4] We would like to inquire whether there were any differences in thyroid function test results between the two study groups. Patients with abnormal thyroid function should ideally be excluded from the study.

Moreover, the latter half of pregnancy is biologically associated with a progressive increase in insulin resistance.[5] Sliem et al.[6] reported that prediabetic individuals demonstrate increased aortic stiffness, indicative of cardiovascular risk. These changes are most pronounced in prediabetic individuals with elevated Homeostatic Model Assessment of Insulin Resistance (HOMA-IR) and visceral adiposity, regardless of glucose levels. Some studies suggest that it may contribute to insulin resistance and poor glucose metabolism, both of which are frequently associated with increased EFT.[7] Furthermore, a direct correlation between HbA1c and epicardial adipose tissue (EAT) has been demonstrated.[8]

We believe that in order to determine whether HOMA-IR and HbA1c are significant predictors of ASI and EFT, these parameters should be considered and included in the statistical analysis. It would be valuable if the authors could provide this information.

**Conflict of Interest:** The authors have no conflicts of interest to declare.

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