

## Early Age at Onset of Diabetes Mellitus May Be Worse in Terms of Metabolic Side Effects

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*Dear Editor,*

We faithfully read the article "General and Gender Characteristics of Type 2 Diabetes Mellitus Among the Younger and Older Age Groups" written by Samir Burhanaldin Al-Mukhtar et al. with a great interest.<sup>1</sup> The authors concluded that younger type 2 diabetics (<60 years), particularly females, had cardiovascular risk factors in significantly higher rates; including dyslipidemia, smoking habits, hypertension, high body mass index, in addition to the non-modifiable risk factor; the positive family history. They reported that this group of diabetics require a more stringent approach of therapy. Thanks to the authors for their contribution of a study successfully designed and presented. We believe that these findings will elucidate further studies relating to diabetes and cardiovascular risk factors.

Diabetes mellitus is one of the most widely prevalent diseases,<sup>2</sup> and it is a cardiovascular risk equivalent. That means we should accept a diabetic patient to have atherosclerotic disease that can cause any morbidity and mortality at any time, putting them at risk of more than 20% in the following ten years. Diabetes mellitus is associated with endothelial dysfunction and inflammation. Higher rates of endothelial damage and inflammation are responsible from the metabolic side effects and end organ complications in diabetic populations.

In another view, the study compares, whether the mean values are considered and assessed very simply, a population with diabetes mellitus that started 7 years ago, at the age of 44 to a population with diabetes that started 4 years ago, at the age of 60. The results really deserve emphasizing in terms of reporting higher cardiovascular risks in younger patients. In fact, as discussed in the

study, differences in smoking habits and body weight are important risk factors to be mentioned within this respect.

Older age is in fact a known cardiovascular risk factor and we know that when patients get older than 40 years of age, their cardiovascular risks dramatically increase. However, we already know that younger patients have a better capability and give stronger immune responses in any infectious, rheumatologic or autoimmune condition compared to older patients. We think that the higher capability of starting and maintaining inflammation in younger patients may be responsible from the end organ damage and metabolic side effects seen more frequently in younger diabetics. In this point of view, the findings of the study should not be surprising.

*Sincerely,*

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### References

1. Al-Mukhtar SB, Fadhil NN, Hanna BE. General and gender characteristics of type 2 diabetes mellitus among the younger and older age groups. *Oman Med J* 2012 Sep;27(5):375-382.
2. Khan MU. Lifestyle Modification in the Prevention of Type II Diabetes Mellitus. *Oman Med J* 2012 Mar;27(2):170-171.