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**Admission hemoglobin level and prognosis of type 2 diabetes mellitus** **and possible confounding factors: Correspondence**

Sookaromdee P *et al*. Hemoglobin and prognosis of diabetes

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**Abstract**

This letter to editor discusses on the publication on admission hemoglobin level and prognosis of type 2 diabetes mellitus. A comment on published article is raised. The specific confounding conditions on the hemoglobin level are mentioned. Concerns on clinal application are raised and discussed.

**Key Words:** Diabetes; Hemoglobin; Confounding; Type 2 diabetes mellitus

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**Core Tip:** This letter to editor discussing on the publication on admission hemoglobin level and prognosis of type 2 diabetes mellitus. Concerns on clinal application are raised and discussed.

**TO THE EDITOR**

We read with interest a case report on “Association between admission hemoglobin level and prognosis in patients with type 2 diabetes mellitus” by Song *et al*[1]. A retrospective examination of patients diagnosed with type 2 diabetes mellitus (T2DM) bet was undertaken[1]. End-stage renal disease or a 50% drop in estimated glomerular filtration rate was the composite outcome[1]. Song *et al*[1] concluded that Hemoglobin levels and renal damage were found to have a U-shaped connection in T2DM patients. Hemoglobin levels below 13.3 g/dL at admission are an independent indicator of renal injury[1]. This report by Song *et al*[1] might add some data on application of hemoglobin level in monitoring of diabetic patient. In type 2 diabetes patients, Matsuoka *et al*[2] found that the duration of hypoglycemia was inversely associated with hemoglobin and hemoglobin A1C levels, and was longer at night than during the day. The kidney issue could be the result of a protracted period of hyperglycemia.

There are many possible confounding conditions on the hemoglobin level. In our setting in Indochina, many local people have a common inherited disorder, thalassemia, that has low hemoglobin level. In these thalassemic patients, renal impairment is also common regardless having diabetes or not[3]. Therefore, the conclusion on association by Song *et al*[1] might be applicable in some settings, but not all settings, such as our setting in Indochina. This correspondence can provide a novel insight that the application of hemoglobin level as an indicator might be limited in the area with high prevalence confounding hemoglobin disorder problem.

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**Footnotes**

**Conflict-of-interest statement:** The authors declare no conflict of interest.

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