Is fibrinogen plasma level a risk factor for the first 24-hour death of medically treated acute type A aortic dissection patients?

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We have read with great interest the article titled "Is fibrinogen plasma level a risk factor for the first 24-hour death of medically treated acute type A aortic dissection patients?" by Sheng Yang (1). The article pointed that ATAAD patients with a fibrinogen plasma level of >4.0 g/L have lower first 24-hour mortality when treated medically, while patients with a fibrinogen plasma level of \leq 4.0 g/L are more likely to die without surgery in the first 24 hours.

In this article, the authors analyzed many clinical characteristics like age, sex, blood pressure, *et al.*, but they didn't collect patient's eating habits, daily physical activities, triglycerides level, low-density lipoprotein and high-density lipoprotein data, because all those factors can affect fibrinogen plasma level in plasma.

High-fat diet and hyperlipidemia can lead to increased fibrinogen levels, Halle *et al.* (2) reported when in hyperlipidemia, especially hypertriglyceridemia, the increase in the synthesis of very low-density lipoprotein in the liver is also accompanied by an increase in the synthesis of coagulation factors, lipoprotein can activate the coagulation factor after contacting it, blood is in hypercoagulable state. Proper exercise can reduce fibrinogen levels, Montgomery *et al.* (3) observed the fibrinogen levels of 156 male soldiers during military training, they found that the level of fibrinogen was significantly reduced and the death rate from cardiovascular disease was also relatively low, so we believe it is better to add those parameters in order to draw a more accurate conclusion, otherwise, they could constitute confounding bias, subgroup analysis and further discuss could draw a more rigorous conclusion.

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Footnote

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