

Fluvastatin decreasing interleukin-8 production may be used to reduce cardiovascular risk in patients with Behcet's disease

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Behcet's disease (BD) frequently occurs in our daily clinical work. BD patients usually need intensive care in the late-stage of the disease because of frequently occurred cardiovascular events [1-3]. However, potential medical interventions to patients with BD still remain unclear. Here, we speculate that fluvastatin decreasing interleukin-8 (IL-8) production could be used to reduce the cardiovascular risk in BD patients.

BD is characterized by a multi-systemic inflammatory disorder. Previous studies showed serum IL-8 levels were significantly elevated in BD patients [4]. Furthermore, there is sufficient evidence to support that IL-8 was involved in the establishment and preservation of the vessel wall inflammation within numerous cardiovascular disease, such as atherosclerosis and myocardial infarction [5], showing a novel intervention target for BD. Importantly, fluvastatin, a HMG CoA reductase inhibitor, has been firmly identified to decrease IL-8 production in whole blood⁶ and human vascular smooth muscle cells [6,7], suggesting its potential intervention role in cardiovascular risk in BD patients. Moreover, in addition to the possible way through regulation of IL-8, fluvastatin has been widely confirmed to achieve a remarkable therapeutic effect on cardiovascular disease by modulating lipid metabolism.

In conclusion, fluvastatin may reverse the up-regulation of serum IL-8 levels in BD. If so, reasonable application of fluvastatin as a conventional medication presents a potential therapeutic approach for treating IL-8-induced cardiovascular morbidity and mortality in BD patients.

Conflicts of interest

There are no conflicts of interest associated with this manuscript.

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