



Could blood products obtained from patients with familial Mediterranean fever have beneficial or harmful effects?



The prognostic role of IL-1 in infectious or neoplastic diseases is debatable. It has been stated that IL-1 α can drive immunopathology or protective immune responses during infections. On the other hand, while boosting antimicrobial immunity, IL-1 α activity might result in destructive inflammation [1].

The diseases characterized by spontaneously induced inflammation are defined as autoinflammatory diseases. The most frequent of these diseases is familial Mediterranean fever (FMF). It has been known that IL-1 β production by peripheral mononuclear cells is increased in patients with FMF leading to inflammation. IL-1 β secretion is increased at the onset of and throughout the FMF attacks [2]. In some patients, subclinical inflammation persists during attack free periods [3]. IL-1 β secretion by mononuclear cells is decreased during colchicine treatment, while anakinra or canakinumab treatment blocks IL-1 β receptors.

FMF patients are rich for IL-1 β during attacks. Indeed, their plasma might be rich for IL-1 β during prophylactic treatment. On the other hand, if mononuclear cells of these patients are transfused to another person, these cells would have higher potential for IL-1 β secretion as they would escape from the suppressor effect of colchicine [2].

Patients with FMF might be considered as natural biological source of IL-1 in Eastern Mediterranean where the disease is endemic. Blood

products obtained from these patients may show distinct characteristics, and potential beneficial or harmful effects of these products on the recipients should be clarified.

Conflict of interest

The authors declare that there is no conflict of interest.

References

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