B cell activating factor gene polymorphisms in patients with risk of idiopathic thrombocytopenic purpura.

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Abstract

INTRODUCTION:

B cell activating factor (BAFF) is a ligand belonging to the tumor necrosis factor family and has an important role in B cells development, survival, and immunoglobulin-production. This study was aimed to study the association between haplotypes in the 5' regulatory region of the BAFF gene and susceptibility to idiopathic thrombocytopenic purpura (ITP).

METHODS:

BAFF gene polymorphisms expression at positions (-871C>T, -2701 T>A and -2841T>C) of 5' regulatory region were determined with polymerase chain reaction restriction fragment length polymorphism technique in 40 chronic (ITP) patients and in 50 age- and sex-matched normal volunteers as a control group.

RESULTS:

The difference between chronic ITP patients and control subjects as regards -871C>T polymorphism expression was highly statistically significant with higher expression of T allele in ITP patients than control group ($P < 0.001$). However, the other 2 polymorphisms did not show significant difference between the 2 groups. -871C>T polymorphism was associated with increased risk of chronic ITP with an odds ratio 18.857; however, the other 2 polymorphisms were not associated with an equivalent effect.

CONCLUSION:

-871C>T BAFF gene polymorphism expression had a significant association with chronic ITP disease.

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