



## Investigation of ABCB1 gene polymorphism with colchicine response in Behçet's disease

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**ABSTRACT.** Colchicine is commonly used in the treatment of Behçet's disease. However, some patients are unresponsive to colchicine treatment. Adenosine triphosphate-binding cassette subfamily B member 1 (ABCB1) transports colchicine out of cells. We investigated a possible association of C3435T polymorphism of the ABCB1 (MDR1) gene with colchicine response in patients with Behçet's disease. We randomly selected 97 patients with Behçet's disease, examined ABCB1 (MDR1) gene C3435T polymorphisms, and evaluated patient responses to colchicine. Forty-three patients were colchicine responsive, while the remaining 54 patients were unresponsive. No significant difference was found between genotypic and allelic frequencies of the ABCB1 C3435T polymorphisms in patients with Behçet's disease and healthy volunteers. Also, there was no significant difference among responsive and nonresponsive patients. We concluded that ABCB1 C3435T polymorphism is not associated with a colchicine response in patients with Behçet's disease.

**Key words:** Behçet's disease; Colchicine; ABCB1 gene; Polymorphism