**Objectives**: The aim of this study was to assess the mean platelet volume (MPV), an indicator of platelet activation in patients with infective endocarditis. **Subjects and Methods**: Twenty-nine patients with infective endocarditis and 29 healthy subjects were studied. Plasma MPV values in patients and control subjects were measured on admission and after 2 weeks of specific treatment of infective endocarditis. **Results**: The MPV was significantly higher among patients with infective endocarditis when compared with the control group (9.86 ± 1.1 vs. 8.0 ± 1.0 fl, respectively; p < 0.01). The MPV values of patients with infective endocarditis decreased significantly after treatment from 9.86 ± 1.1 to 7.86 ± 1.0 fl (p < 0.01). Total platelet counts increased significantly after treatment from 193.4 ± 96.5 × 10^9 to 243.7 ± 92.4 × 10^9 (p = 0.04). **Conclusion**: MPV values were higher in patients with infective endocarditis and decreased significantly after treatment. Elevated MPV values indicate that patients with infective endocarditis have increased platelet activation and infective endocarditis treatment decreases this platelet activation by decreasing MPV.