The aim of this study was to assess the values of mean platelet volume (MPV) in regular smokers and the effect of smoking cessation on MPV. The study group consisted of 116 regular smokers (57 females and 59 males; mean age 46.3 ± 12.7 years) and the control group was composed of 90 healthy volunteers (49 females and 41 males; mean age 47.7 ± 8.3 years). Platelet indices were assessed in regular smokers and control participants. Platelet indices were measured at 3 months after smoking cessation in these 101 participants. The MPV values were significantly higher in smokers than those of controls (8.8 ± 0.9 vs 8.0±0.8 fL, respectively; P < .001). The MPV values decreased significantly at 3 months when compared with the baseline values (8.9 ± 1.0 vs 7.9 ± 0.7 fL, respectively; P < .001). We have found that serum MPV values were significantly higher in regular smokers than in controls. Serum MPV values decreased significantly at 3 months after smoking cessation.