Background: Diabetic retinopathy is a risk factor for pseudophakic cystoid macular edema (PCME). However, the visual outcome and changes of central retinal thickness (CRT) in diabetic patients without retinopathy were not so definite. We compared the visual outcome and CRT changes after surgery in diabetic patient without retinopathy and normal controls. The relationship to HbA1c was also evaluated. Methods: Patients underwent uncomplicated phacoemulsification cataract surgeries were enrolled during May 2009 to February 2012. CRT and Best-corrected visual acuity (BCVA) were obtained preoperatively, in week one, two, four, and eight. Results: 101 eyes in control group and 58 eyes in diabetic group were enrolled. Increase in CRT was observed in week two (p=0.038), four (p<0.001), and eight (p<0.001) in control group as well as in DM group in week four (p<0.001), and eight (p=0.005). The percentage changes in CRT were different between both groups in week four (p=0.043), but the difference vanished in week eight (p=0.152). There was no difference in BCVA in all time periods. Besides, the CRT changes and visual outcome were not related to HbA1c level. Conclusions: The final visual outcome in diabetic patient without retinopathy is as good as in controls. Significant increase in CRT postoperatively is noticed in both groups, but the diabetic eyes seemed to be more prominent and have delayed recovery in CRT change. Besides, the visual outcome and changes in CRT were not related to the level of HbA1c. Therefore, diabetes mellitus alone without retinopathy may not be a poor prognostic factor for post-cataract surgery visual recovery and PCME.