Purpose: To assess the outcome of frequency-doubled Nd:YAG (532 nm) laser photocoagulation (LP) with HRT III Macular Edema Module in patients with clinically significant macular edema (CSME).

Methods: 62 patients (94 eyes) with CSME undergoing grid LP were included. HRT were performed at baseline and 2 months after the treatment. Macular edema index (MEI) and macular thickness (MT) were calculated. At baseline patients were grouped according to MT values (mild to severe; groups 1 to 3).

Results: While group 2 showed significant reductions in MEI (0.41, p<.01) and MT (79 µm, p<.001) values group 1 and 3 did not show any significant changes.

Conclusions: Patients with moderate CSME benefit most from LP treatment. HRT may be a relatively simple method of documenting change in ME and HRT Macular Edema Module may help in choosing the appropriate treatment for CSME based on the degree of macular thickening.