

# Pseudophakic Cystoid Macular Edema After Phacoemulsification Surgery Measured By Spectral Domain Optical Coherence Tomography

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**Objective:** To determine the incidence of pseudophakic cystoid macular edema (CME) after phacoemulsification surgery in Chiangmai University Hospital using spectral domain optical coherence tomography (SD-OCT) and to determine the risk factors for pseudophakic CME.

**Methods:** Prospective cross-sectional study was conducted. Ninety seven eyes which underwent phacoemulsification surgery by staffs and residents during September 2012 to March 2013 were recruited. The SD-OCT measurement was performed preoperatively and postoperatively (1 day, 1 week, 1 month and 4 months) in all cases. The SD-OCT images were evaluated for the evidence of CME.

**Results:** The incidence of postoperative CME was 6.18% (6/97). The peak incidence rate of CME developed at 1 month after surgery (4.12%) by using SD-OCT. There was no correlation between macular thickness changes, best corrected visual acuity (BCVA), ultrasound power and ultrasound time. Patients with diabetes or intra-operative complication did not have an increase risk of CME.

**Conclusions:** The incidence of postoperative CME in this academic base setting was found 6.18%. OCT screening of the eyes at high risk for CME would be recommended in order to get early CME detection and the proper treatment.