

Poster Presentation

## The Use of Pilocarpine Eye Drop for Estimation of Time Since Death

Larpkrajang S, Worasuwannarak W, Peonim V, Udnoon J, Srisont S

*Department of Pathology, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

**Objective:** To study of estimation of time since death by Pilocarpine eye dropping.

**Methods:** One hundred adult deceases that were actually known of the time of death were included in this study. The Left pupil of each decease was measured in millimeter unit. Pilocarpine eye drop was applied to the left eye. The pupil was measured again 10 minutes after dropping and statistical analysis was used to analyse the correlation of the time since death and the change of pupil.

**Results:** The longest time since death that pupil have reaction to Pilocarpine was 15 hours 9 minutes. The correlation of the change of pupil and the postmortem interval was found (Spearmans rho,  $r = -0.304$ ,  $p = 0.002$ ) and the change of pupil may be used to predict the postmortem interval by the regression equation as follow;  $PMI = 8.310 - 3.702 (\text{Diff}) \pm 0.735$  (PMI was postmortem interval in hours and Diff was the difference of the size of pupil after dropping Pilocarpine in millimeter).

**Conclusion:** This study revealed that dropping Pilocarpine may be useful for estimation for time since death.

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