

THE REPEATABILITY OF SMITH'S METHOD IN MEASURING ANTERIOR CHAMBER DEPTH

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ABSTRACT

Aims: The aim of this study is to assess the intra-observer repeatability and the inter-observer limits of agreement of the Smith's technique in measuring ACD.

Methodology: Twenty-two healthy participants with range of age from 24 to 25 were examined on their ACD by two examiners and in two sessions.

Results: The mean difference for intra-observer was -0.04 ± 0.29 mm with limits of agreement (LoA) of -0.60 to +0.52 mm and inter-observer mean difference was -0.09 ± 0.30 mm with LoA of -0.68 to +0.50 mm. The ICC findings for intra-observer repeatability was 0.482 with 95% confident interval = 0.085 - 0.746. For the inter-observer agreement, the ICC result was 0.594 with 95% confident interval = 0.022 - 0.831.

Conclusion: The Smith's technique in estimating ACD is repeatable upon measurement by different examiners and the values are repeatable upon measurement at different sessions. Hence, the Smith's technique can be used with a moderate degree of repeatability and agreement to monitor longitudinal changes in the ACD.

Keywords: anterior chamber depth, Smith's technique, repeatability, angle-closure glaucoma