

Sample of English Rewriting

Field of research: Medicine

INTRODUCTION

~~Intraocular pressure (IOP) is one of the most important clinical index for glaucoma clinical practice because the difference of only 1 mmHg affects visual field progression.~~ Intraocular pressure (IOP) is one of the most important ~~indices~~ indices in the clinical management of glaucoma as visual field progression can be affected by slight differences of only 1 mmHg¹. In both clinical and research settings, the standard method of measuring IOP employs Goldmann applanation tonometry (GAT), with a significant amount of research evidence in this field based on IOP values obtained using GAT².

~~Now the standard method of measuring IOP is goldmann-applanation tonometry (GAT).~~

~~Numerous significant evidencies were indicated by using IOP value of GAT.~~²

While GAT is a safe and ~~convienient~~ convenient procedure, it is prone to ~~but there are~~ human errors ~~due and to~~ reading bias,³ and ~~principle~~ differences between theoretical and actual IOP values may result ~~and real IOP~~ because of GAT ~~architecture~~ is easily affected by variables such as corneal thickness and tear films⁴.

In contrast, ~~d~~Dynamic contour tonometry (DCT; Swiss Microtechnology AG, Port, Switzerland) has the advantage ~~over GAT in these areas~~ ~~in those weak points of GAT~~.

DCT utilizes a mechanical sensory system, which reduces reading bias ~~In DCT measuring, mechanical sensing system reduces reading bias~~⁵ and has been reported to have high concordance with manometry IOP measurements ~~high accordance with manometry of intraocular pressure was reported~~.⁶

Furthermore, DCT is less affected by corneal variables such as central corneal thickness (CCT) ~~the character that DCT was hard to be affect by central corneal thickness (CCT) was reported~~.⁷, a feature which is of particular importance since Japanese typically exhibit a thinner CCT than other ethnicities ~~That character was~~

Comment [BeK1]: CHECK:

Please check that «reading bias» is a correct and appropriate term to use here.

Comment [BeK2]: CHECK:

When you refer to «architecture», are you referring to the structural variations in the patient's eyes such as «corneal thickness», or is «architecture» a property of GAT?

important feature for Japanese:

~~Because Japanese CCT was thinner than other race's CCT.~~⁸

There have been numerous studies in the literature comparing GAT and DCT, with the majority of findings supporting DCT and its clinical implications in Japanese. ~~Numerous articles about the comparison of GAT and DCT have been reported.~~^{9,10-12}

~~There are many positive result about relation between DCT and CCT,~~^{9,10-12} ~~that relation is clinically significant for Japanese ,but some negative result have been reported.~~ Some studies however, found no difference between GAT and DCT and reported both techniques to be equally reliable^{13,14}.

~~And there is a~~Disagreement ~~about over~~ the relationship between DCT and corneal curvature ~~remains, despite capabilities which have allowed it to overcome the limitations of GAT.~~^{15,16}

~~Therefore the consensus about the relationship between DCT and corneal properties has not been builded yet , despite DCT has the potential to complement the limitation of GAT.~~

To our knowledge, no studies comparing DCT and GAT techniques have been performed in Japan. Given the importance of IOP as a clinical index in the management of glaucoma, the high prevalence of glaucoma in the Japanese¹⁷, and their genetic predisposition to thinner corneas, the value of such a study was unquestionable.

~~Combiend with great clinical significance of IOP measuring ,high prevalence of glaucoma in Japan,¹⁷ and potential capacity of DCT complementing weakpoints of GAT, a resarch about DCT measuring for Japanese patients should be conducted.~~

~~But, there is no Japanese study of DCT to our best knowledge.~~

The aim of this study was ~~to~~ evaluate the reliability of IOP measurements obtained from GAT and DCT in a group of ~~obtained~~ IOP of Japanese glaucoma patients ~~by comparison of DCT,~~ simultaneous measuring of ~~GAT and DCT at the same day was performed for Japanese with~~ primary open angle glaucoma (POAG) patients.

Comment [BeK3]: Rather than saying «negative result», consider explaining in brief what these studies found, for example «some studies found no difference between GAT and DCT and reported both techniques to be equally reliable in the diagnosis, monitoring, and management of glaucoma».