



Comparison of Retinal Nerve Fiber Layer Structures and Macula Thickness in Opioid Dependent and Normal Adult

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Introduction

Recently, we read with interest the article entitled as “ Comparison of Retinal Nerve Fiber Layer Structures and Macula Thickness in Opioid Dependent and Normal Adult ” by Kuen et al. [1] showing difference of Retinal Nerve Fiber Layer thickness (RNFL) in opioid abusers compared with healthy individuals. In this study, authors recruited 35 individuals abuser of heroin/morphine/methadone as opioid dependent group and identical number of healthy Malay individuals as control group. They detected significant decreased RNFL thickness in superior quadrant and right eye of opioid abusers. Although their results are

interesting, herein we would like to discuss regarding the methodology of the study. We think that cigarette smoking is a confounding factor that have not been considered in this study.

In the methods section of the study, cigarette smokers have not considered as an exclusion of criteria. Previously published papers indicate paramount effect of smoking on RNFL thickness. Dervisoğulları [2] showed significant lower thickness of RNFL in superior and inferior quadrants in smokers vs. nonsmokers. So, smoking is an important confounding factor that could af-



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fect the results. This factor is important when we consider that more than 90 percent of opioid abusers are cigarette smokers [3]. Furthermore, opioid agents had varied effects due to different potency, pharmacodynamics and pharmacokinetic. Heroin had two to four folds higher potency in comparison with morphine [4]. Therefore, enrolling opioid abusers with varied substance dependency could affect our inference from the results. Stratification of data regarding the substance and discussion about different mechanism of action could improve the manuscript. All in all, we suggest that results of this study could be more reliable after considering smoking status of participants and adjusting data of opioid abusers regarding their substance.

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