Dry age-related macular degeneration associations with systemic disorders

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Introduction: An age-related macular degeneration (AMD) result in loss of central vision and it is of two types: dry and wet AMD. Dry form: Cellular debris (drusen) accumulates between the retina and choroid, causes damages in retina.

Purpose: The Objectives of this study is to understand the relationship between dry AMD, long-term hypertension, diabetic mellitus, obesity and high low-density lipoprotein (LDL) cholesterol levels, and to compare the percentages of developing AMD in healthy population and patients with the above factors.

Methods: In this study, based on 3000 patients for a period from 2014 January till 2016 March with a age range between 50-70 years, analysis of retinal photographs and MPOD values on Visucam 500, thickness of drusens with optical coherence tomography cirrus, history of BP, FBS, LDL cholesterol and BMI parameters were carried out for each patient, and were categories into six groups each containing 500 subjects and AMD was graded into 3 stages by, number of drusens >63 μm.

Results: Study group presence with 23.76% (1188 pt’s) AMD subjects, AMD presentation in each groups shows; High BP: 1st stage-19%, 2nd stage-33.4%, 3rd stage-18.6%; Diabetes: 1st stage-18%, 2nd stage-26.8%, 3rd stage-14.2%; High BMI: 1st stage-16%, 2nd stage-25.4%, 3rd stage-13.2%; High LDL cholesterol: 1st stage-18.2%, 2nd stage-17.8%, 3rd stage-17%; Family history of AMD: 1st stage-9.4%, 2nd stage-11.6%, 3rd stage-9.6%; and Healthy: 1st stage-1.8%, 2nd stage-2.6%, 3rd stage-2.2%.

Conclusion: Population of 50-70 years with above diseases is at a considerable risk of developing AMD compare to normal. Long term hypertension is the highest risk group. 2nd stage contains more patients compare to others; a healthy lifestyle prevents earlier manifestations of AMD.

Biography
Amila Chandrasekara has completed Ophthalmic Assistant Certificate in the year 2011 and has done his Diploma in Optometry in 2015 from Vision Care Optical Services Academy. Currently, he is working in the Retinal Diagnosis Unit at Vision Care Optical Services (Pvt) Ltd., Sri Lanka.

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