Retinopathy grading and glycemic control of diabetes patients in retinal screening clinic, Yangon General Hospital

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Background

Total diabetes patients attending to Yangon General Hospital Out-patient diabetes clinic were 1160 in 2015. Estimated annual attendees are 1300 – 1500. From January 2017 to June 2017, 471 diabetes patients were assessed in retinal screening clinic of Diabetes and Endocrinology Department by using retinal camera donated by Brighter Future Foundation UK. Retinopathy grading was done by UK's National Retinal Screening Committee guideline.

Objective

To review the correlation between retinopathy grading and glycemic control of diabetes patients

Methods

Hospital based cross sectional survey conducted on retinopathy record sheets of patients who were screened between January to June 2017

Results

Total 471 diabetes patients were screened from January to June 2017. Among them, 110 (23%) were males and 361 (77%) were females. Out of all, type 2 diabetes patients were 413, type 1 diabetes patients were 24 and gestational diabetes patients were 34. According to retinopathy screening guideline, no diabetic retinopathy (no DR) was found in 342 patients, non-proliferative diabetic retinopathy (NPDR) in 83 patients and proliferative diabetic retinopathy (PDR) in 46 patients. When assessing glycemic control of patients, mean HbA1c was 8.7% in no DR group, 9.33% in NPDR group and 10.27% in PDR group. Pearson Correlation showed significant correlation (0.004) between value of HbA1c and retinopathy grading and also significant correlation (0.005) between value of HbA1c and maculopathy grading.

Conclusion

There is a significant correlation between retinopathy grading and glycemic control of diabetes patients in this survey.