Diabetic Retinopathy Challenges In Developing Countries: Awareness And Severity At Presentation Of Diabetic Retinopathy And Barriers To Its Treatment.

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Abstract:

Diabetic retinopathy is a common cause of visual loss in diabetic patients. Diabetic population is increasing throughout the world and Pakistan ranked third in the world in terms of diabetic population. Pakistan is having the highest 26.7% prevalence of diabetes 2022'. Due to low socio-economic status of the people, poor health education and limited resources for treatment our patients present with advanced stages of retinopathy. In most of the developing countries there is lack of proper screening and treatment facilities in most hospitals. In this study we acquired awareness level of diabetic patients about diabeticretinopathy, risk factors for progression, referral system from the treating physician endocrinologist, stage of retinopathy at first presentation and the barriers to treatment.

Methods:

It was a descriptive study carried out in Ophthalmology Department of Khyber Teaching Hospital Peshawar, Pakistan from February 2023 to November 2023. Participants were selected by consecutive convenience sampling method from the outpatient department. Patients who presented for the first time to ophthalmologists were included in the study. Totalof 340 patients with 680 eyes were enrolled in the study.

Results:

At presentation 72.2% of patients were having diabetic retinopathy on their first screening, with 31.3% of patients were having mild non-proliferative diabetic retinopathy, 11.2% proliferative diabetic retinopathy and 5.4% with advanced diabetic eve disease (ADED). Diabetic macular edema (DME) was present in 56.2% of the eyes, with centre involving 39° and 61% with non-centre involving diabetic macular edema. Most of the patients were not having any awareness about the risk factors for diabetic retinopathy progression. More than half of the patients (52.35%) presented to ophthalmologist for decrease vision due to diabetic retinopathy without any referral by the treating physician. Endocrinologist referred 19.7% of the patients for retinopathy screening, physician 12.35% and general practitioner referred only 3.52% of the patients for diabetic retinopathy screening. The most common barriers to diabetic retinopathy screening are lack of awareness of patients about diabetic retinopathy accounting for 71.17% of patients followed by non-affordability (42.94%),transportation (21.17%), dependency (12.64%).

Conclusion:

Health education about diabetic retinopathy is very important in developing countries in order to decrease the disease burden on health system with meager treatment resources. Along with patients treating physician and endocrinologist need to be made aware about this disease for proper referral and timely management.

Key word: diabetic retinopathy, awareness, severity of retinopathy, barriers.

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