2016

www.jmscr.igmpublication.org Impact Factor 5.244

Index Copernicus Value: 83.27 ISSN (e)-2347-176x ISSN (p) 2455-0450 crossref DOI: http://dx.doi.org/10.18535/jmscr/v4i8.47



Journal Of Medical Science And Clinical Research An Official Publication Of IGM Publication

Risk of Retinopathy in Relation To Diabetic Patients

Authors

Nandhini.S¹, Dr Naufal Rizwan² ¹Third Year BDS, Saveetha Dental College and Hospitals ²MD (General medicine) Corresponding Author Nandhini.S

Email: nandhiniss107@gmail.com

ABSTRACT

AIM- *The aim of this article is to prove the incidence of retinopathy in patients with diabetes*

OBJECTIVE- *Diabetic retinopathy is the most frequent cause of blindness in many patients in the recent studies. Vision loss due to retinopathy occurs due to various reasons.*

METHODOLOGY- 50 diabetic patients in Saveetha medical college are examined and results are concluded.

BACKGROUND- Frequently retinopathy is the ocular manifestation of systemic disease as seen in diabetes. The prevalence of retinopathy is being checked by an ophthalmologist during examination and the results are proved.

KEYWORDS – diabetic, blindness, retina.

AIM

• The aim of this article is to prove the incidence of retinopathy in patients with diabetes.

MATERIALS AND METHODS

50 diabetic patients in Saveetha Medical college and examined and prevalence of retinopathy is checked by an ophthalmologist.

Inclusion criteria - All diabetic patients above the age of 18

Exclusion criteria - Patients with other causes of retinopathy like hypertension are excluded.

DISCUSSION

Diabetic retinopathy occurs as a result of high blood sugar and can cause blindness if left untreated. It is an eye condition that affects people with diabetes who have high blood glucose, or sugar, over a prolonged period of time. Too much blood sugar can destroy the blood vessels in the back of the eye, preventing the retina from receiving the proper amount of nutrients it needs to maintain vision. Visual impairment is the most feared long-term consequence of diabetes. Several conditions contribute to the problem of loss of vision in diabetes, including diabetic and hypertensive retinopathy, and increased risks of retinal vascular occlusion, cataract formation and glaucoma. The rise in number of people with diabetes to an estimate of 4 million in UK by 2025, together with increasing life expectancy, are daunting prospects if retinopathy prevalence remains at 40%. Risk factors for diabetic retinopathy are of 3 categories. Non-modifiable factors includes Genetic factors, gender and duration of diabetes. Modifiable factors are Glycaemia, blood pressure and lipid levels.Additional factors includes Carotid arterial pregnancy, renal impairment disease, and smoking. The ocular complication of diabetes may be specific to progression of the ocular disease or, more commonly, may be non-specific recognised associations of diabetes in the eye.

RESULTS

Of the 50 patients examined,21 patients are found to have Diabetic Retinopathy.42% of patients were found to have positive results after examination by the ophthalmologist.

CONCLUSION

However, some optimism is warranted as reversal of retinopathy is possible in the earlier stages and there is evidence from several studies that both proliferative retinopathy and/or severe visual loss have been reduced in recent years.New therapies such as intravitreal treatments may also affect outcome. As management of diabetes and retinopathy improves, other ocular problems may become more dominant as causes of visual loss in diabetes.Counselling on diabetic retinopathy is required as soon as diabetes is diagnosed and retinal screening commenced.Studies have shown significant reduction of quality of life scores at diagnosis of diabetic retinopathy and when vision is impaired.Patienteducation plays an important role in management of retinopathy as increased awareness is linked with motivation.So this article relates the risk of retinopathy in diabetic patients and came up with a conclusion that if all the above said measures are followed, the prevalence of diabetic retinopathy can be minimised in diabetic patients.

REFERENCES

- Wong TY, Mwamburi M, Klein R, Larsen M, Flynn H, Hernandez-Medina M, Ranganathan G, Wirostko B, Pleil A, Mitchell P. Rates of progression in diabetic retinopathy during different time periods: a systematic review and metaanalysis. Diabetes Care. 2009 Dec;32 (12): 2307-13.
- Jeganathan VS, Wang JJ, Wong TY. Ocular associations of diabetes other than diabetic retinopathy.Diabetes Care. 2008 Sep;31(9):1905-12.
- 3. Diabetes control and complications trial. The relationship of glycemic exposure (HbA1c) to the risk of development and progression of retinopathy in the diabetes control and complications trial. Diabetes 1995 Aug;44(8):968-83.
- 4. UK Prospective Diabetes Study (UKPDS) Group. Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). Lancet. 1998 Sep 12;352(9131):837-53.
- Stratton IM, Cull CA, Adler AI, Matthews DR, Neil HA, Holman RR. Additive effects of glycaemia and blood pressure exposure on risk of complications in type 2 diabetes: a prospective observational study (UKPDS 75). Diabetologia. 2006 Aug; 49(8):1761-9. Epub 2006 May 31.
- Matthews DR, Stratton IM, Aldington SJ, Holman RR, Kohner EM; UK Prospective Diabetes Study Group. Risks of progression of retinopathy and vision loss related to tight blood pressure control in type 2 diabetes mellitus: UKPDS 69. Arch Ophthalmol. 2004 Nov;122(11):1631-40.
- ACCORD Study Group; ACCORD Eye Study Group, Chew EY, Ambrosius WT, Davis MD, DanisRP,Gangaputra S, Greven CM, Hubbard L, Esser BA, Lovato JF, Perdue LH, Goff DC Jr, Cushman

JMSCR Vol||04||Issue||08||Page 11970-11972||August

WC,Ginsberg HN, Elam MB, Genuth S, Gerstein HC, Schubart U, Fine LJ. Effects of medical therapies on retinopathy progression in type 2 diabetes. N Engl J Med. 2010 Jul 15;363(3):233-44. Epub 2010 Jun 29.

