

جا معة الإمام عبد الرحمن بن فيصل IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

مستشفى الملك فهد الجامعي King Fahad Hospital The University

Diabetes effect on

the eyes





What is diabetic retinopathy?

Damaged blood vessels feeding the retina by either leakage or blockage, affecting the cells responsible of vision.

Abnormal blood vessels may grow on the surface of the retina causing bleeding or scarring in the retina and leading to permanent retinal damage or even blindness.

Retinopathy associated with diabetes mellitus is the main cause of blindness in diabetics.

It is considered the most common vascular complication in diabetics.

The prevalence of diabetic retinopathy is 19.7% and the prevalence of macular edema is 5.7% in Saudi Arabia.





What are the factors influencing the

occurrence of diabetic retinopathy?

- The incidence of diabetic retinopathy increases with longer duration of having the disease. Around 40% of diabetics are affected with retinopathy after living with diabetes for 30 years.
- Lack of control over blood sugar levels, especially cumulative screening (HgbA1C).
- Overweight or higher body mass index (BMI).



- The presence of high blood pressure, high fat levels and cardiovascular diseases.
- Pregnancy and puberty.
- Smoking.





What are the factors influencing the

occurrence of diabetic retinopathy?

 Deterioration of kidney function and the use of diuretics.



- After cataract surgery.
- People with type I diabetes have a higher susceptibility to macular edema than type II diabetes.
- Heredity, having a family history of diabetic retinopathy increases the risk of retinopathy in generations after them as well, so treatment and periodic examination should be carried out more precisely.





What are the symptoms of diabetic

retinopathy?

Early stages: blurred vision.



Advanced stages: deterioration of vision, dim and blurry vision.

Treatment: it depends on the stage of retinopathy. You may not need treatment in the initial stages and adhering to diabetes treatment with physical activity and controlling blood pressure and fat level prevents the condition from worsening.

Advanced stages: You may need a laser, eye injection, surgery.





When should a diabetic see an ophthalmologist?

An annual periodic eye exam is recommended at the same time of diagnosing type II diabetes, while for type I diabetes, it is recommended at five years from the diagnosis

General tips:

- Prevention of diabetic retinopathy and slowing its progression in diabetic retinopathy patients depends on the proper control of blood sugar and lipid levels and blood pressure.
- Retinopathy associated with diabetes may occur without any complaint from the patient, so early diagnosis and periodic examination are very important.
- Keeping blood sugar levels from falling too low is also important to prevent diabetic retinopathy.
- Care must be taken to regulate blood sugar levels even after laser retinal treatment.

Resources and references:

All illustrations used are from Canva.com

Review and audit:

The content of this booklet has been reviewed by consultants of Ophthalmology at King Fahd University Hospital.

Department of Ophthalmology

Health Awareness Unit

IAU-22-348



جا معة البما & عبد الرحمن بن فيصل IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

مستشفى الملك فهد الجامعي King Fahad Hospital The University