



# **Artículos originales**

## **NEJOM**

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**EDITORIAL**

## Screening for Diabetic Retinopathy

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# ADA

## GUIDELINES

1. Patients  $\geq 10$  years of age with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 3–5 years after the onset of diabetes. In general, screening for diabetic eye disease is not necessary before 10 years of age. However, some evidence suggests that the prepubertal duration of diabetes may be important in the development of microvascular complications; therefore, clinical judgment should be used when applying these recommendations to individual patients. Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes is made.
2. Subsequent examinations for both type 1 and type 2 diabetic patients should be repeated annually by an ophthalmologist or optometrist who is knowledgeable and experienced in diagnosing the presence of diabetic retinopathy and is aware of its management. Examinations will be required more frequently if retinopathy is progressing. This follow-up interval is recommended recognizing that there are limited data addressing this issue. As previously discussed, data from WESDR showed that patients with type 2 diabetes who received ETDRS standard seven-field stereoscopic color fundus photographs that revealed no retinopathy when evaluated by a skilled reader did not generally require another retinopathy examination for 4 years because of low risk of disease progression. However, in patients with gross proteinuria or poor glycemic control ( $>2$  SD from the mean of the nondiabetic population), annual examinations were indicated even if the initial review using fundus photography revealed no retinopathy. Despite the WESDR findings, we believe that an annual eye examination is still warranted for the following reasons. First, these data were derived from a study that evaluated white, northern European-extraction patients with diabetes living in southern Wisconsin. The results may not be applicable to African-American, Hispanic-American, Asian-American, or other populations where it is unknown if retinopathy progresses in the same manner. Second, a well-designed quality-control program was used in WESDR to ensure accurate interpretation of fundus photographs. Such quality control efforts have not been standardized or completely described, let alone adopted nationwide. Third, the potential for patient loss to follow-up induced by an extended hiatus between ophthalmic evaluations introduces further uncertainty.

# ADA

## En resumen:

- Primera valoración en el momento del diagnóstico de diabetes tipo 2, antes de 3-5 años tras el diagnóstico en diabetes tipo 1.
- Evaluaciones anuales posteriormente en ambos tipos.

# Estudio

- Análisis de cohorte de 1441 pacientes con DM tipo 1, a lo largo de 30 años.
- Objetivo: individualizar riesgo de retinopatía.

# Estudio

- Aplicación web para el cálculo de siguiente visita, según:
  - Actual grado de retinopatía.
  - Hemoglobina glicosilada.
- Dicho algoritmo extiende el cribado en pacientes de bajo riesgo a 3-4 años.
- En 20 años, supone un descenso del 50% de técnicas realizadas.

# Estudio

- Disminución de adherencia al cribado. Con actual modelo al menos 1/3 de pacientes no siguen el cribado.
- Aumento de indicaciones de VEGF intravitreo. Con la expansión de los estudios de imagen en retina, la detección de mal perfusión podrían cambiar el algoritmo.

# Bibliografía

Rosenberg JB, Tsui I. Screening for Diabetic Retinopathy. N Engl J Med [Internet]. 2017 Apr 20 [cited 2017 Jul 30];376(16):1587–8. Available from: <http://www.nejm.org/doi/10.1056/NEJMe1701820>