

# Madigan Army Medical Center Referral Guidelines

## Diabetic Retinopathy

### Diagnosis/Definition

- Diabetic Retinopathy (DR) is a retinal vascular disorder associated with Diabetes Mellitus (both Type I and Type II).
- Pathologic changes seen in diabetic retinopathy include vascular leakage, capillary occlusion, intraretinal and intraocular hemorrhage, fibrovascular proliferation and retinal detachment.
- Symptoms of profound visual loss may not occur until late in the course of DR although lesser degrees of visual loss can occur much earlier.
- The best predictor of DR is the duration of the disease.

### Initial Diagnosis and Management

- For patients with Type I DM, virtually no DR is apparent from 0-4 years after initial diagnosis. After 5-9 years, 25% to 50% of patients will have retinopathy. This increases to 67% to 71% after 10-16 years and 90% from 17 to 50 years. In Type II DM, DR typically develops more slowly. Due to the insidious nature of Type II DM, occasionally the onset of retinopathy precedes the diagnosis of DM.
- DR is most accurately detected by thorough retinal fundus examination by a skilled examiner through a dilated pupil. It is most effectively followed by serial examinations and stereoscopic fundus photography and fluorescein and angiography, when indicated.
- The recommended timing of initial ophthalmologic examination of diabetic patients is upon the diagnosis of diabetes and yearly thereafter.
- Once retinopathy develops, the type of examination and frequency should be directed by an Ophthalmologist.

### Ongoing Management and Objectives

- Educate the patient on the importance of early and consistent blood sugar, blood pressure, and serum cholesterol control in preventing visual loss.
- Decrease the rate of visual loss in patients with DR through appropriate and timely referral.

### Indications for Specialty Care Referral

- Initial exam and annual exam: Patients can self-refer for screening retinal exams by calling TRAC and asking for a BBDM - diabetic study.
- Type I and Type II: at the time of diagnosis.
- Semi-urgent exam: Submit routine or 72 hour consult to "Ophthalmology" depending on clinical situation. Any documented visual loss of recent nature in diabetic patient.

### Criteria for Return to Primary Care

If no or "mild" retinopathy is detected, patients will be returned to primary care with yearly ophthalmologic examination.

Last Review for this Guideline: **October 2009**  
Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division  
Clinical Practice and Referral Guidelines Administrator