OCULAR COMPLICATIONS OF DIABETES

NEW TRENDS IN MANAGEMENT
Have we made any progress in the last 43 years?

- We no longer do hypophysectomy for proliferative diabetic retinopathy (PDR).
- We no longer do therapeutic abortion for PDR in pregnant diabetic mothers.

Diabetic retinopathy, particularly diabetic macular edema, is still the leading cause of blindness in working age adults.

What's new: The anti-VEGF drugs and intraocular steroids may work better at resolving diabetic macular edema than laser treatment alone. If your patient complains about the cost, as if his ophthalmologist can use Avastin instead of Lucentis.

Diabetics require cataract surgery earlier than non-diabetics of the same age.

What's new: Cataract surgery is vastly improved with new intraocular lens designs and smaller incisions than ever before. The Femtosecond laser is now being used to make incisions to correct astigmatism and perform a perfectly circular opening in the anterior capsule, and then to cube the nucleus. The jury is not yet back on whether the greater precision the the laser brings to the procedure is worth the increase in cost ($3,000 per eye, not covered by insurance).

Diabetics have an increased risk for developing glaucoma.

What's new: Selective laser trabeculopexy is low risk, usually effective in lowering intraocular pressure, and saves the patient money by reducing or eliminating glaucoma medications. This is not the same laser used for retinal laser treatments.

What's really new:

- Alcon has licensed Google's smart lens technology for ocular and systemic disease management.
- An adeno-associated virus (AAV)-based platform for gene therapy for retinitis pigmentosa will start human trials at U of M in 2015. Work is underway for gene therapy for age-related macular degeneration, and hopefully, diabetes and diabetic retinopathy.

Bonus information: Diabetic gastroparesis may be reversed in some patients with one tablet of sildenafil daily.

Carol R. Kollarits, M.D.

Eye Institute of Northwestern Ohio

3509 Briarfield Blvd.

Maumee, Ohio 43537

419-865-3866