Diabetic retinopathy and foveal hypoplasia

**Background:** The spectrum of foveal hypoplasia (FH) ranges from a narrow central avascular zone to that of absent foveal pit with continuity of the superficial vascular layers and absent FAZ. In cases of diabetic retinopathy in FH, these features result in a central micro-vascular disease with unique characteristics.

**Purpose:** To present the pathological features of diabetic retinopathy in cases of FH as they are seen in retinal imaging.

**Methods:** Patients with foveal hypoplasia and diabetic retinopathy underwent fundoscopic examination, OCT and FA imaging. The images were analyzed to determine the degree of hypoplasia and to identify the characteristics of the retinopathy.

**Results:** The distribution of retinal capillaries reduced foveal avascular zone (FAZ) was demonstrated. Diabetic retinopathy in these cases was characterized by microaneurysms and hard exudates in extreme proximity to the foveola. Cystoid spaces within the retina were also more likely to occur at the center of the fovea.

**Conclusions:** The natural history and implications for therapy of diabetic maculopathy are related to variations of foveal anatomy as well as to known systemic factors. In FH, micro-angiography presents centrally and early visual loss from edema and exudates may ensue.

**Biography**

Ayala Pollack is a Professor and Chairperson of the Ophthalmology Department at Kaplan Medical Center. She graduated from the Sackler School of Medicine, Tel Aviv University with the honour of distinction and award for excellent thesis. During Medical school she started basic science research in the Department of Embryology and Teratology, Sackler School of Medicine, Tel Aviv University. She completed training in Ophthalmology Kaplan Medical Center and in the Department of Ophthalmology, Rothschild Hospital, Haifa, Israel affiliated to the Technion-Israel Institute of Technology.

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