Association of serum lipid levels and other systemic risk factors with retinal hard exudates in diabetic retinopathy patients.

Harshita Mukesh Hiran

Follow this and additional works at: https://impressions.manipal.edu/kmcmlr

Part of the Medicine and Health Sciences Commons
**Thesis Title:**
Association of serum lipid levels and other systemic risk factors with retinal hard exudates in diabetic retinopathy patients.

**Name of Investigator:**
Dr. Harshita Mukesh Hiran (Postgraduate Student, Department of Ophthalmology, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Manipal, Karnataka, India- 576104)

**Registered No:** 200221004

**Mobile No:** 8879359693

**Email ID:** harshitahiran@gmail.com

**Official Address:** Department of Ophthalmology. Kasturba Medical College Hospital, Attavar, Mangalore- 575001

**Name of Guide:** Dr. Ajay Kamath

**Name of Co Guide:** Dr. Teena Mendonca

**Introduction:**
Diabetic Retinopathy is a major complication of diabetes mellitus, which remains a leading cause of visual loss in working age populations. It is the most common microvascular complication of diabetes mellitus. Clinically, DR is divided into two stages- non proliferative diabetic retinopathy (NPDR) and proliferative diabetic retinopathy (PDR). Hard exudates in the retina are one of the hallmarks of diabetic retinopathy. The hard exudates are composed of lipid and proteinaceous material such as fibrinogen and albumin that leak from the impaired blood retinal barrier. Data from ETDRS and other studies have demonstrated that elevated serum lipid levels are associated with an increased risk of hard exudates in eyes with diabetic retinopathy. This risk of permanent vision loss highlights the importance of hard exudate prevention and of identifying modifiable risk factors for hard exudates which could help guide counseling of participants with diabetes.

**Aim**
To study the association of serum lipid levels and other systemic risk factors with retinal hard exudates in diabetic retinopathy patients

**Objectives**
1)To evaluate the association between serum lipid levels and retinal hard exudates in patients with diabetic retinopathy.

2)To study the association between serum lipid levels and severity of macular edema on SD-OCT exudates in patients with diabetic retinopathy.

3)To study association of systemic risk factors such as impaired renal profile and HbA1c with severity of macular edema and retinal hard exudates in patients with diabetic retinopathy

**Keywords:** Hard exudates, diabetic retinopathy, lipid levels

**Study design:** Prospective, Cross sectional study