MATERIALS AND METHODS
The present study was carried out in the department of Ophthalmology, M.L.B. Medical College, Jodhpur over a period of one year from 1990-1991. Diabetic patients attending the Diabetic Clinic of department of Medicine and also those attending the Out Patient Department of Ophthalmology, coming therefore there routine eye check-up were all and only taken in our study. All the patients were thoroughly examined with special emphasis on the patients intra-ocular tension and fundus, and were recorded on a pre-designed proforma.

Our case material was then grouped as:

Control := 17 normal non-diabetic persons were taken as control for present study.

Study group :=

I. Cases having Juvenile Diabetes.
II. Cases having maturity onset diabetes mellitus (MOM).
Selection of Cases

Control:- Total 17 cases were taken as control for the present study. The external examination of eye and detailed history was taken. Diseases affecting the intraocular pressure as iridocyclitis glaucoma, corneal ulcers etc. were not considered for the study. Those patients with normal internal examination of eye and fundus were taken.

Study Group:-

I. Selection of Juvenile Diabetes

Those diabetics who are insulin dependent, usually have a positive family history, symptoms start abruptly, very rarely gradual, and patients are usually below 40 year of age.

II. Maturity onset Diabetes Mellitus

Persons not dependant on insulin, but showing hyperglycemia, symptoms start gradually, manifest after 40 year of age usually are NON patients.
Detailed clinical history of the patient, his family history was taken and the cases were examined thoroughly. Eye was examined thoroughly for any ocular infections, or other associated disease. Then laboratory investigations, viz. Blood sugar levels fasting or random were done for each case. The intraocular tension was taken by Schiotz tonometer of both the eyes and detailed fundus examination was done.

PROCEDURES FOLLOWED DURING THE STUDY

After taking the history and examining the patients, Blood Sugar Levels for all the patients were recorded. Tension of both the eyes were recorded by the standard certified Schiotz tonometer, patient was made in recumbent position, 4% xylocaine instilled into eye 2-3 times, 1-2 drops each time, cornea was anaesthetized and then tension was taken. Same tonometer was used throughout the study. Any person having very high tension was referred to glaucoma clinic and excluded from the study. Those cases with relatively high tension were examined and observed closely to exclude associated close angle glaucoma.
Pupils of the patient's eyes were then dilated using 10% phenylephrine drops, 1-2 drops instilled at 5-15 minit interval, 3-4 times. Fundus was seen by direct ophthalmoscope and the retinal status was graded according to Wagner's classification.

Statistical analysis was done to derive mean and standard deviation (S.D.). Mean values were compared using 't' test and significance of difference was tested.