Table 1. Demographics of the Study Population

hwork (thin and unstable team	Normal	MGD
Number	20	20
Age (yr)	31	38.5
Gender (F/M)	13/7	14/6
Refractive error		
spherical equivalent (D) (mean±SD)	-2.81±2.06	-2.76±3.21
astigmatism (D) (mean±SD)	0.88±0.62	0.66±0.37

Table 3. Surface Regularity Indices in Normal and MGD

Taticitis			
(5594) 66-72	SRI	SAI	
Normal (40 eyes)	0.43±0.26	0.21±0.15	
Open meshwork (10 eyes)	$0.71\pm0.43$	$0.44\pm0.3$	
Wave (14 eyes)	0.41±0.22	$0.23\pm0.2$	
Amorphous (8 eyes)	0.42±0.26	0.27±0.18	
Color fringe (8 eyes)	0.19±0.18	0.18±0.14	

Table 2. Distribution of Corneal Topographic Patterns

Keratographic pattern	Normal	MGD	
Round	9 (22.5%)	12 (30%)	NS
Oval	11 (27.5%)	10 (25%)	NS
Symmetric bowei	10 (25.0%)	3 (7.5%)	p<0.05
Asymmetric bowei	6 (15.0%)	6 (15%)	NS
Kidney	1 ( 2.5%)	2 (5%)	NS
Irregular	3 (7.5%)	7 (17.5%)	NS ·
Total (eyes)	40	40	

NS: Non-significant.

Test paper was inserted into the patient lower conjunctiva sac after local anesthesia had been administered completely. After 5 min the tears wetted the strip of filter paper, and the data were revealed in millimeters.

Sheffer posterior comparison and proportion test were used for statistical analysis.

## RESULTS

Forty eyes of 20 MGD patients and 40 eyes of 20 normal subjects were the objects in this study. Demo-

graphic data are shown in Table 1. There were no differences in age and gender factors between the 2 groups. Refractive status was also similar in the 2 groups. The distribution of corneal topographic patterns is given in Table 2. Compared with normal eyes, patients with MGD had lower percentage of symmetric bowei type pattern (25% in normal subjects vs. 7.5% in MGD patients, p< 0.05). Although MGD eyes showed more of the irregular type (17.5%) than did normal eyes (7.5%), this did not reach a significantly different level.

In MGD patients, the lipid layer color fringe type had lower SRI (0.19  $\pm$  0.18) and SAI (0.18  $\pm$  0.14)

Table 4. Basic Schirmer's Test Results in Normal and MGD
Patients

	(mm)
Normal	8.64±6.02
Open meshwork	4±2.93
Wave	8.75±6.45
Amorphous	8.02±5.51
Color fringe	8.25±3.12

Table 5. NIBUT in Normal and MGD Patients

	(Seconds)
Normal	22
Open meshwork	9
Wave	27
Amorphous	41
Color fringe	31