ORIGINAL RESEARCH

Assessment of type of lid defects

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ABSTRACT

Background: Lid disorders that require reconstructive surgeries typically involve conditions that affect the normal function, appearance, or integrity of the eyelids. These conditions can be congenital, acquired, traumatic, or related to tumors. The present study was conducted to assess type of lid defects. **Materials & Methods:** 52 cases undergoing eyelid surgery of both genders were selected. For the local examination, a careful analysis of the defect was carried out. The pre-operative, intra-operative and post-operative photographs were taken. A pre-operative evaluation on the type and the nature of the surgery was done and the patients were subjected to the concerned surgical procedures. **Results:** Out of 52 patients, males were 28 and females were 24. Age group 2-30 years had 9, 31-40 years had 17, 41-50 years had 16 and 51-60 years had 10 patients. The difference was significant (P< 0.05). Lid defects were senile entropion in 6, senile medial ectropion in 4, severe senile ectropion in 2, simple congenital ptosis in 5, simple dermoid cyst in 20, neurogenic ptosis in 8, meibomian gland carcinoma in 3 and traumatic ptosis with IIIrd nerve palsy in 4 cases. The difference was significant (P< 0.05). **Conclusion:** Common lid defects were senile entropion, senile medial ectropion, severe senile ectropion, simple congenital ptosis, simple dermoid cyst, neurogenic ptosis, meibomian gland carcinoma and traumatic ptosis with IIIrd nerve palsy.

Keywords: Lid disorders, Eye, Congenital

INTRODUCTION

Lid disorders that require reconstructive surgeries typically involve conditions that affect the normal function, appearance, or integrity of the eyelids.[1] These conditions can be congenital, acquired, traumatic, or related to tumors.Because of its function and significance to the facial look, the rebuilding of the eyelids is an extremely demanding procedure.[2]

Ptosis is abnormal drooping of the upper eyelid.Ptosis repair involves tightening the levator muscle or its tendon to lift the eyelid to a more natural position.[3]Epiblepharon is a condition where a fold of skin and muscle pushes the eyelashes against the eye.Reconstructive surgery involves removing the excess skin and muscle to relieve the pressure on the eyelashes.[4]

A thorough understanding of the natural position of the eyelids, their structural support system, and the forces that maintain their precise balance are necessary for the best possible restoration of their form and function.[5] With this information, the surgeon can select from a variety of reconstructive approaches to repair a loss, taking into account its size, location, and depth, all the while preserving the natural function of the eyelids and their attractive appearance.[6]The present study was conducted to assess type of lid defects.

MATERIALS & METHODS

The present study was conducted on 52 cases undergoing eyelid surgery of both genders. All were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. The evaluation of the general state of the patient's health was done. For the local examination, a careful analysis of the defect was carried out. The pre-operative, intra-operative and post-operative photographs were taken. A pre-operative evaluation on the type and the nature of the surgery was done and the patients were subjected to the concerned surgical procedures. A histopathological examination was done for the concerned cases. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 52		
Gender	**Male**	**Female**
Number	28	24

Table I shows that out of 52 patients, males were 28 and females were 24.

Table II Age wise distribution

Age group (years)	Number	P value
21-30	9	0.76
31-40	17	
41-50	16	
51-60	10	

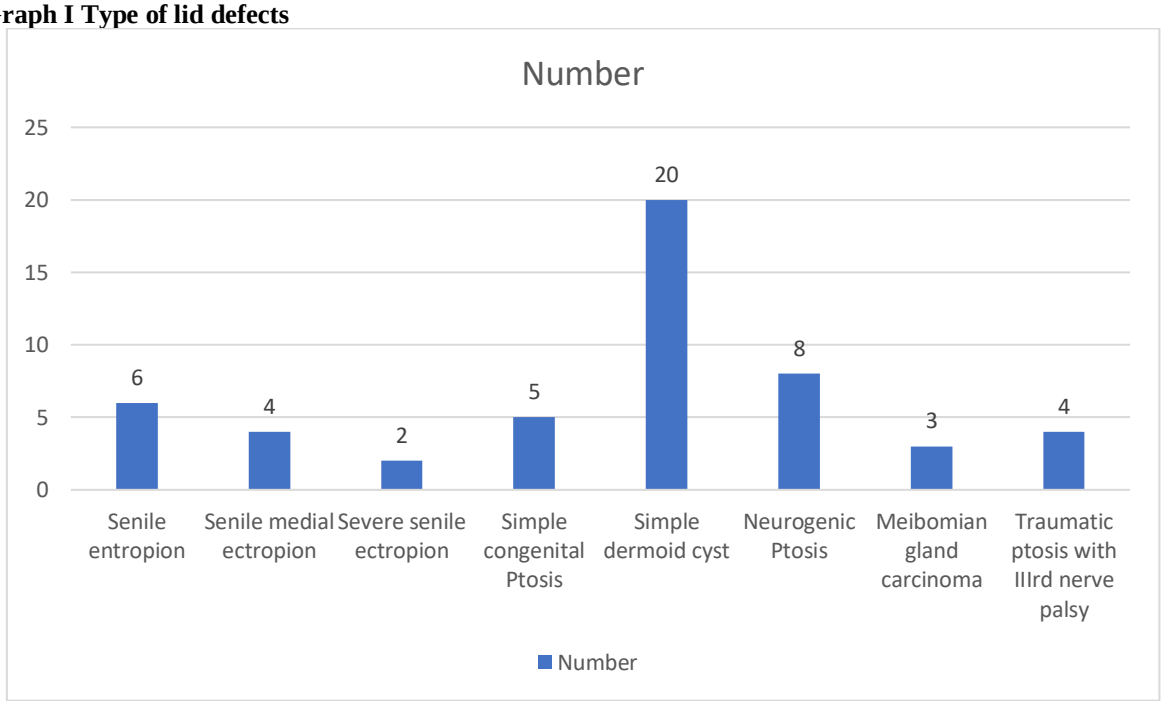
Table II shows that age group 2-30 years had 9, 31-40 years had 17, 41-50 years had 16 and 51-60 years had 10 patients. The difference was significant (P< 0.05).

Table III Type of lid defects

Lid defects	Number	P value
Senile entropion	6	0.05
Senile medial ectropion	4	
Severe senile ectropion	2	
Simple congenital Ptosis	5	
Simple dermoid cyst	20	
Neurogenic Ptosis	8	
Meibomian gland carcinoma	3	
Traumatic ptosis with IIIrdnerve palsy	4	

Table III, graph I shows that lid defects were senile entropion in 6, senile medial ectropion in 4, severe senile ectropion in 2, simple congenital ptosis in 5, simple dermoid cyst in 20, neurogenic ptosis in 8, meibomian gland carcinoma in 3 and traumatic ptosis with IIIrd nerve palsy in 4 cases. The difference was significant (P< 0.05).

Graph I Type of lid defects



DISCUSSION

A senile entropion is caused due to horizontal lid laxity and the overriding of the tarsus by the infratarsal tissues.[7] It is corrected by producing a bracing effect for the lower lid by overlapping the orbicularis occuli band by using the Modified Wheeler's Operation.[8]Reconstructive eyelid surgery requires careful planning and precise execution to

restore both function and aesthetics. The choice of technique depends on the specific condition, extent of the defect, and individual patient factors.[9,10]The present study was conducted to assess type of lid defects.

We found that out of 52 patients, males were 28 and females were 24. Biradar et al[11]evaluated the basic principles of lid reconstructive surgeries. The study included 25 patients. The patients included were those who were diagnosed to have Entropion, Ectropion, Ptosis and Lid tumours, in the age group of 10-69 yrs. The commonest was ectropion with 8 (32%) cases, followed by entropion, lid tumours and ptosis.

We found that age group 2-30 years had 9, 31-40 years had 17, 41-50 years had 16 and 51-60 years had 10 patients. Guy et al[12]evaluated the efficacy of the transconjunctival entropion repair (TCER) for a lower eyelid involutional entropion. This study which showed the surgical correction of the involutional entropion by the reinsertion of the lower eyelid retractors had a similar outcome with both the internal (transconjunctival) and the external (subcilliary) approaches. Recurrence was higher with the internal approach (15% vs 3% with the subciliary incision), but this was not statistically significant.

We found that lid defects were senile entropion in 6, senile medial ectropion in 4, severe senile ectropion in 2, simple congenital ptosis in 5, simple dermoid cyst in 20, neurogenic ptosis in 8, meibomian gland carcinoma in 3 and traumatic ptosis with IIIrd nerve palsy in 4 cases. A study which was conducted by Melanie H.[13]Erb on transconjunctival entropion repair, resulted in the resolution of the entropion with a success rate of 96.7% (146 of 151 eyelids) the entropion recurrence rate was 3.3% (5 of 151 eyelids). Sa et al[14] successfully repaired significant full-thickness upper eyelid abnormalities (more than 80% of the eyelid width) caused by tumors using the reverse modified Hughes method combined with orbicularis muscle mobilization. With its strong vascular supply, the orbicularis oculi muscle's mobility improves the viability and aesthetic appeal of the restored eyelid. Epithelial keratopathy, lagophthalmos, upper eyelid entropion, granuloma development, and lower eyelid entropion were among the consequences.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that common lid defects were senile entropion, senile medial ectropion, severe senile ectropion, simple congenital ptosis, simple dermoid cyst, neurogenic ptosis, meibomian gland carcinoma and traumatic ptosis with IIIrd nerve palsy.

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