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SENILE ENTROPION CORRECTION BY MATTRESS SUTURE - NEW METHOD

Ophthalmology

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ABSTRACT

To study the effect of mattress future in – the correction of senile entropion In the present study patients with senile entropion were included, with aseptic precaution under. local anesthesia two armed rapid absorbable surgical suture used to correct inturning of the lower lid suture passed from inside through lower tarsal plate to outside tightened surgical knot at outer portion of lower lid just 1mm below the margin tightness applied on surgical knot which later followed by scar formation in the track of stiches placed in the eye lid to turn it outward to achieve normal anatomical lid position. All 100 patients of senile entropion corrected with surgical stiches like mattress suture in the lower lid. In comparison with male patients females were more. In this study involvement of unilateral senile entropion more than bilateral, 8% patients develop minimal intra and post-operative complications while 92% patients have normal restoration of anatomical lid position.

KEYWORDS

Senile entropion, Mattress Suture

INTRODUCTION :

Entropion is interning of lower lid it is of four verities senile, spastic, cicatrical, congenital. Senile entropion is the most common.

Etiological factors in the development of senile entropion

a) Weakning of the capsulopalpebral fascia along with leavator aponeurosis in lower eyelid.
b) Horizontal lid laxity caused by stretching of the canthal tendons.
c) Vertical lid laxity caused by disinsertion of lower lid retractors.
d) Appositional pressure of the lids during eyelid closure.

Criteria for inclusion of patients

a) Poor lower lid retractor function.
b) All elderly patients with primary entropion
c) Recurrent entropion after surgical correction.

Exclusion Criteria of patients :

1) Enucleated eyes
2) Lower eye lid tumors
3) Severe Grade IV eye lid burns:

METHOD:

100 eyes of 100 patients were included in this study for correction of senile entropion with everting mattress suture method. All surgeries were performed by one surgeon. Main aim is to correct lower lid position. After conjunctiva was anesthetised by using 4% topical xylocaine and 2cc of 2% Xylocaine was injected subcutaneously with 26 12 inch needle into lower lid, then eye lids were cleaned with Betadin Solution. The distance between punctum and lateral canthus is divided into quarters with junction between most medial and adjacent quarter being entry point for the first suture away from the punctum. Skin of the lower eye lid pulled downward. Single armed 3-0 Vicryl rapid absorbable surgical suture is used. The needle passed to Pearce the skin 3mm below lower lid margin, then needle turn towards conjunctival fornix then it is passed below inferior border of tarsal plate, white line, to engage the lower lid retractor, then turn needle upside and outside from the conjunctival side towards skin, just lateral to suture of entry point. Tight surgical knot given below lower lid margin. The second entry point at 2mm lateral to first entry point in same fashion 3 to 4 sutures were passed to correct the lower lid position. The surgical knot on skin surface tied tightly to produce 1mm post operative ectropion. All sutures look like mattress, these sutures are allowed to get absorb or fall spontaneously.

All patients were assessed preoperatively and 1,2,4,6 monthly post operatively. Pre operative and post operative data collection included in the estimation of lower lid retractor function. All intra operative and post operative complications were noted.

Differences between entropic and non entropic lids were analysed. The group of patients with a successful outcome were compared with those in the treatment failure group using one sample test for proportion < 0.05 Statistically significant.

1) Age Distribution of patients

Age in year	No. of Patients	%
40 - 50	18	18 %
50 – 60	40	40 %
60 – 70	20	20 %
70 – 80	12	12 %
80 – 90	10	10 %
Total	100	100 %

2) Sex distribution of patients

Sex	No. of Patients	%
Male	34	34 %
Female	56	56 %
Total	100	100 %

3) Laterality

Laterality	No. of Patients	%
Unilateral	88	88 %
Bilateral	22	22 %
Total	100	100 %

4) Distribution of eyes.

Eyes distribution	No. of patients	%
Rt. Eye	54	54%
Lt. Eye	46	46%
Total	100	100%

5) Previous Surgery

Previous surgery	No. of patients	%
Recurrent Entropion	8	8%
Primary Entropion	92	92 %
Total	100	100 %

One sample test of proportion
Z = +30.96
P = 0.0000
Highly significant

6) Post operative eyelid position at 6 months, Entropion recurred.

Month	No. of patients	%
0 – 1	0	0
1 – 2	0	0
2 – 3	4	50%
3 – 4	2	25%
4 – 5	0	0
5 – 6	2	25%
Total	8	100%

At the end of 6 month entropion recurred in 8 pts.

Failure rate at 6 Months - 8 Pts.
No. Treatment failure in - 92 Pts.

7) Comparison of the treatment success and failure group

Success	No. of patients	%
Post operative normal	92	92 %
Lid position		
Failure	8	8 %
Total	100	100%

8) Failure group

Patient age in years	No. of Patients
40 – 50	2
50 – 60	3
60 – 70	1
70 – 80	1
80 – 90	1
Total	8

P = 0.0000
Highly Significant

RESULT: -
Mean age of patient 67, There are 34% males and 56% females. The cases were followed postimperial for mean duration of 6 months. All lids resolved with obtaining normal lid position. Only 8% pt. had anatomic recurrence. with minimal intra & postoperative complications best normal lid correction clinical in 92% patients eyes highly significant.

Fig. 01: Senile entropion of lower lid

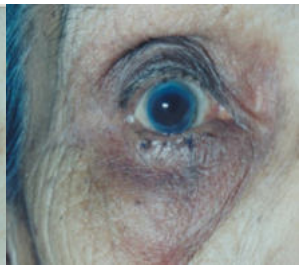

Fig. 02: Correction by matters suture

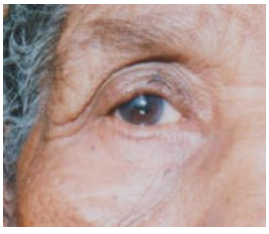

Fig. 03: Pot operative normal lower lid

DISCUSSION :
Everting sutures have been used for correction of lower lid entropion since the time of Hippocrates and remain the most simple form of surgical treatment. 1971, Marvin Quickert advocated quickert entropion correction by suture method Dr. Feldstein, Dr. John J Alpar from Saint Leurke Eye Hospital, Texas modified quickert everting suture method. [2]

In Comparison with entropic and non entropic lid position there is significant change in lower lid retractor function after insertion of everting mattress suture. mattress suture is effective and simple procerure less complicatiom lead only rapid observable sutures. More Lid laxity need more tightness in the surgical knot to restore normal anatomical lid position. [5] Age & sex of the patient not influencing the outcome. Mechanism of mattress suture is that suture engage the lid retractor & transfer the pull towards anterior surface of trasal plate. There is creation of fibrotics sutures scars at the suture track. The sutures were kept as it is to develop cicatrix which later gives normal lid position.

In few patients best post operative care cures complications.
Two patients develop acute inflammatory reaction around each suture! which was settled after course of cap Ampicloxacillin 500 mg bd for 3 days. Four patients were noted to have minimal degree of entropion at 4 months visit and found to be a symptomatic. 3) Five patients develop sub conjunctival hage settled in 8 to 10 days after course of tab vit C 500 mg od and cold sponging.

CONCLUSION :
Everted mattress suture can be inserted in all types of senile entropion. Mattress suture correction is long lasting. It is cheap method and can be performed within five minutes only. All patients are elderly medical & social problems are with them so it can be performed in patients first visit.

In this study eight patients not develop significant scaring, 92 pts having post operatively normal eye lid position. The overall cosmosis was excellent in all patients.

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Conflict of Interest : - Nil

REFERENCES
1. Jones LT. The anatomy of the lower eyelid: and its relation to the cause and cure of entropion. American Journal of Ophthalmology. 1960 Jan 1;49(1):29-36.
2. Quickert MH, Rathbun JE. Suture repair of entropion. Arch Ophthalmol 1971;85:304–5.
3. Lance SE, Wilkins RB. Involutional entropion. A retrospective analysis of the Weis procedure alone or combined with horizontal procedure. Ophthalmic Plast Reconstr Surg 1991; 7:273–7
4. Kersten RC, Hammer BJ, Kulwin DR. The role of enophthalmos in involutional entropion. Ophthalmic plastic and reconstructive surgery. 1997 Sep 1;13(3):195-8.
5. Hurwitz JJ. Senile entropion: the importance of eyelid laxity. Canadian Journal of ophthalmology. Journal Canadien D'ophtalmologie. 1983 Aug 1;18(5):235-7.