

# Intralesional Steroid in the Treatment of Chalazion

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## Research Article

**Abstract: Aim:** 1) To study the predisposing factors responsible for Chalazion. 2) To study the effectivity of intralesional injection of long acting steroid in the treatment of Chalazion. **Objective:** To find out the advantages of intralesional injection of long acting steroid in chalazions over Incision and Curratage of the chalazion. **Material and Method:** The study was carried out during period of 1<sup>st</sup> March 2012 to 1<sup>st</sup> March 2013 in IIMS & R medical college, Warudi. During this period the effectivity of intralesional injection of long acting steroid in the treatment of Chalazion was studied. All the patients were OPD patients of both genders from urban or rural area. The sample size was 50.

**Results:** Most of the patients i.e. 47.72% in this study were young patient of ages between 11 yrs and 20 yrs. and least were from the both extremities of ages. The maximum patients i.e.44% were presented with chalazion of two months duration. In 100% of cases the site of chalazion was away from the lid margin and no chalazion was on the lid margin. In 88% cases the chalazia, were firm in consistency and the incidence of cystic chalazion was 0.0%. The maximum chalazia were of size between 4 mm to 6mm The percentage was 48%. When the predisposing factors for chalazia were studied, 40.91% chalazia were found with no any underlying cause. 18.18% were having Refractive errors, 15.91% had Blephritis overcrowding and malnutrition was found in 11.36% cases while 2.56% were Daibetic patients. Among the 50 chalazia 86% were cured with the treatment of intralesional injection of triamcinolone acetonide while 14% cases were not cured and thus treated with Incision and Curratage. **Conclusion:** Treatment of chalazion by intralesional injection of triamcinolone acitonide is a best method in the treatment of chalazia with good cure rate. It is very useful in the treatment of multiple chalazia in a single sitting and in Chalazia at medial canthus which is near to punctum.

**Keywords:** Intralesional steroids, Triamcinolone acitonide, chalazion.

## Introduction

Chalazion is a chronic inflammatory granuloma caused primarily by retention of a secretion of a tarsal gland. The chief effects of chalazion are cosmetic disfigurement with variable discomfort. The standard treatment of chalazion is by incision and curettage, although spontaneous resolution may take place in a few patients. The advantage of intralesional long acting steroid over conventional surgery are that it is simple and cheap, requires no special instrument and is convenient for both doctor and patient multiple chalazia in eyelids of both sides can be treated in the same sitting. This treatment is

specially suitable for the chalazion near the medial canthus to avoid damage to the lacrimal canaliculus.

## Materials and Methods

In the present study over a period of one year from 1<sup>st</sup> march 2012 to 1<sup>st</sup> march 2013, 44 patients with 50 chalazia attending the OPD of IIMS & R medical college warudi were included. Permission obtained from the ethical committee. These patients were treated by intralesional injection of triamcinolone acetonide. No chalazia was excluded from trial regardless of the time of onset, position, size, presence of inflammation or consistency. Each patient was examined at the end of first, second, third and fourth week after this procedure had been performed. If after two weeks, there was no significant improvement in the lesion the same procedure was repeated and the patient was again followed up at weekly interval for two weeks. If the lesion is failed to respond to a repeated procedure it was considered as failure of treatment and it was then treated with the alternative procedures. In this technique the conjunctiva was anaesthetised with 4% xylocaine or propaiane or can be given through skin side. In this study injections were given from the skin side with 26 gauze needle in the chalazion without using the chalazion clamp. The average valume of 0.2 ml of 10 mg/ml suspension of triamcinolone acetonide (kenocort) was injected. The eye was not padded after the procedure in patients with more than one chalazia, all were injected at the same sitting. The follow up was done for about one month. All the patient were investigated for haemogram, Random blood sugar level and urine routine exam. Complete ophthalmic examination was done including visual acuity testing, slit lamp biomicroscopy, fundus examination and tension recording. Bacterial culture of conjunctiva of lower cut-de-sac of involved eye were performed Hypertension was ruled out before the procedure.

## Result

44 cases with 50 Chalazia attending the ophthalmic OPD of IIMS & R medical college Warudi, Tq. Badnapur,

Dist. Jalna were studied over a period of one year and the following observations were made.

**Table 1:** The No. of Patients and the No. of Chalazia

Type of Treatment given	No. of Cases	No. of Chalazia
Intralesional steroid injection	44	50

**Table 2:** Age Distribution of the Patients

Age (Years)	No. of Cases.	Percentage (%)
0-10	1	2.27
11-20	21	47.72
21-30	14	31.81
31-40	7	15.91
More than 41	1	2.27
Total	44	100.0

**Table 3:** Sex distribution of the patients

Sex	No. of Cases	Percentage
Male	20	45.45
Female	24	54.55
Total	44	100.00

**Table 4:** Duration of Chalazia at the time of treatment

Duration (Months)	No. of Chalazia	Percentage
Up to 01	16	32
Up to 02	22	44
Up to 03	9	18
Up to 04	1	2
More than 4	2	4
Total	50	100

**Table 5:** Lid involvement of Chalazia

Lids	No. of Chalazia	Percentage (%)
Right upper	15	30
Right lower	13	26
Left upper	17	34
Left. lower	5	10
Total	50	100

**Table 6:** The Situation of Chalazia on lids

Lids	No. of Chalazia	Percentage (%)
Away from the lid margin	50	100
At the lid margin	00	00
Total	50	100

**Table 7:** Consistency of Chalazia

Consistency	No. of Chalazia	Percentage (%)
Soft	4	8
Firm	44	88
Hard	2	4
Cystic	0	0
Total	50	100

**Table 8:** Sizes of the Chalazia

Size (mm)	No. of Chalazia	Percentage (%)
Up to 02	2	4
2-4	16	32
4-6	24	48
Above 6	8	16
Total	50	100

**Table 9:** Predisposing factors of chalazia

Predisposing factors	No. of cases	Percentage (%)
refractive errors	8	18.18

Blephritis	7	15.91
Over crowding	5	11.36
Malnutrition	5	11.36
Diabetis	1	2.56
No. Cause	18	40.91
<b>Total</b>	<b>44</b>	<b>100</b>

**Table 10:** Response rate of intralesional Steroid

Response	No. of Chalazia	Percentage (%)
Cured	43	86
Not cured	7	14
<b>Total</b>	<b>50</b>	<b>100</b>

## Discussion

The study of treatment of chalazion by intralesional injection of triamcinolone acetonide was carried out in 44 patients with 50 chalazia attending the out patients clinic in the department of ophthalmology IIMS & R Medical College, Warudi, Tq. Badnapur, Dist. Jalna. In this study the maximum patients were in the age group 10 to 20 years that is 47.72% Table No. 1 shows the agewise distribution of the patients. Out of 44 patients 20 (45.45%) were males and 24 (54.55%) were females. Most of the patients (44%) in the study were presented with duration up to 2 months. The percentage of lid involvement is showned in table no. 5 it suggests that involvement of upper lid was more than that of lower lid. All the Chalazia (100%) in this study were present away from the lid margin. Out of 50 chalazia 44 (88%) were firm in consistency while the others were soft or hard. The size of the chalazia was about 4mm to 6mm in about 48% as mentioned in table No.8. The predisposing factors are mentioned in the Table No.9 and it was found that maximum patients i.e.40.91% were found to have no any predisposing factor. In this study out of 50 Chalazia, 43 (86%) were cured but 7 were not cured by intralesional injection of triamcinolone acetonide. Out of 43 Chalazia 36 (84%) were, cured by single injection of triamcinotone. However 7 (16%) Chalazia required second injection after 15 days. Remaining 7 Chalazia were not responded to two injections of triamcinolone then these were treated by incision and curattage.

## Conclusion

Treatment of Chalazion by intralesional injection of triamcinolone acetonide offer a method which requires minimal facilities, less time, no patch (pad) is required and patients compliance is very good with minimum pain, bleeding and anxiety. There is no risk of damage to conalcnli. Multiple Chalazion can be treated in the single sitting. In the present study, 50 Chalazion were treated with intralesional triamcinolone injection, 43 Chalazia cured showing 86% efficacy. In the present study no complications were noted like rise in intraocular pressure, lid pigmentation, intralesional deposits of steroids, tissue atrophy etc.

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