ORIGINAL RESEARCH PAPER

Volume-8 | Issue-5 | May-2019 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

EFFECT OF LEKHANA (SCRAPING) IN CHALAZION

Ayurveda

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ABSTRACT

Lekhanakarma (Scraping technique) is a parasurgical procedure used for removing of the unhealthy tissues from the body. Chalazion appears to be a consequence of hypertrophic inflammation of the meibomian gland present in the eyelids. The main aim of the study is wish to report the operative outcomes of Chalazion.

Methods: This was random, prospective, non-comparative, interventional study of 40 patients with Chalazion requiring surgical excision. *Lekhanakarma* had been performed by surgical scraping with postoperative care.

Results: After 5 days, Chalazion had resolved in 18 (45%) cases. The postoperative recurrence rate was 10%, and most of the patients satisfied with treatment outcomes. No recurrence was found till 3 month.

Conclusion: The present study shows satisfactory treatment outcomes through adjuvant therapies and continuous monitoring of the clinical course. An average overall improvement for all patients was found to be 87.5%.

KEYWORDS

Chalazion, *Lekhanakarma*, Ayurvedic scraping

Introduction:

Chalazion appears to be a consequence of hypertrophic inflammation of the meibomian gland present in the eyelids. It normally presents as a cosmetically disfiguring firm nodular mass extending from the tarsus either anteriorly toward the skin or posteriorly toward the conjunctiva[1]. Histologically, Chalazion, described as an epithelioid granuloma[2]. It is frequently seen in association with meibomian gland dysfunction[3]. It is worldwide in distribution with a higher prevalence in the hot, humid, and dusty areas. Most Chalazion patients complain of itching, pain, discomfort, heaviness in eye lids. Treatment recommendations go from controlling predisposing factors, use of antimicrobial agents (topical/systemic). Previous studies have found a 25–50% resolution rate with this conservative treatment[4]. Failing this, they are treated surgically by incision and curettage (I&C) under a local anaesthetic injection. In practice many patients were not prepared to undergo an operative procedure the same day, and could not have their eye padded[5]. The study aimed to report operative outcomes of Chalazion with a literature review.

Material and methods

A total of 40 cases were randomly selected and treated for Chalazion between January, 2012 and December, 2016. The study was carried out at eye OPD, Ayurveda College Coimbatore. Patients were asked regarding the clinical features, the type of pain, burning, changes in the size, reoccurrence and past medical history. Pre-medical records and physical examination data were reviewed. All cases underwent to preoperative comprehensive ophthalmic examination including visual acuity, slit lamp examination etc. Laboratory investigations like random blood sugar level, bleeding time, clotting time and ESR done. The patient was selected for the procedure without associated with major diseases i.e. Diabetes mellitus, Tuberculosis (T.B.), Carcinoma, etc.. Informed and written consent was obtained from all the patients.

All requirements are arranged before doing procedure. Patient was let in supine position comfortably on the table for procedure by keeping head in head rest. The method of the surgical procedure is explained to patient and given assurance to patient. Performed all Eyelid surgeries with or without under local Anaesthesia (Injection 2% xylocaine). 2 drops of 2% Paracaine was instilled in all cases before starting the procedure. The eyelids were disinfected with antibiotic lotion and fomented with cloth dipped in warm water. The lid is raised up and reverted, massaged with cotton swab; Chalazion was scrapped with rough surface of *Parijata (Nyctanthesarbortristis L.)* leaf (pre washed with hot water for disinfection). During the procedure few patients were not cooperated for procedure due to pain, in that 2% Xylocaine was injected. During the procedure the small Chalazion was scraped with *Parijata* leaf, meanwhile 26 cases that all are having big and longstanding Chalazion cavities were scrapped after exposure of the granular tissues of the cavity by *Chedana*. Chalazion's were excised at the same time who having multiple. After 2-3 min, when the bleeding was stabilized, eye lid fomented again, *Pratisarana (External application)* was done with pinch of *Sodhita Kasisa (Ferrous sulphate), Pippali (Piper longum L.), Saindhava (Rock salt)* and two drops *Madhu (Honey). Triphalakasaya (decoction of triphala)* was prepared from 50 gms of *Haritaki* (*Terminalia chebula Retz.*), *Vibhitaki* (*Terminalia bellirica (Gaertn.)Roxb.*), *Amalaki* (*Emblica officinalis Gaertn.*) is boiled with 400 ml of water in mild fire. It is boiled till around 200 ml of water remains. The decoction is filtered and collected. *Seka* was done with this Luke worm *Triphalakasaya* and wrapped with plain *Ghrita* (Ghee) for few minutes. After eye became quite, pad was kept over the eyes and applied bandage. They were advised not to rub and squeeze the eye. Patients were recommended to take rest for 3 days after the operation. Oral medication (*Kanchanara guggulu* 1 Tid, *Patyakshadatryadi kasaya* 15 ml Bd) was also recommended. Patients were reviewed after 24 hours bandage was removed, observed the appearance; again *Seka* was done in the operated eye and again bandage applied. After bandage removed, *Seka* was done in all cases for 3 days. All the patients were followed up after 3 days, one week, after 15 days and one month for recurrence and any other complications.

Observation and results

Total 40 cases underwent for the procedure. Our study comprised of 23 (58%) male and 17 (42%) female patients. Almost all of the patients (97%) were less than 50 years of age and majority in the age-group 16-25 years (34%). The left side eyelid was involved in 23 (58%) cases, the right side in 11 (27%) cases and both eyes in 6 cases (15%). The Chalazion were localized in the upper eyelid in 24 (60%) cases, less frequently in the lower eyelid 11 (28%) cases and upper and lower lid both involved in 5 (12%) cases. The size of the Chalazion ranged from 4-8 mm. Swelling was found in 100% Patients; Heaviness in eyelids was found 92.5%, redness was found in 95% where as a symptom itching in eyelids was found 40%. The symptoms pricking pain found in 82.5%. Thus the presences of all the symptoms were studied and their appearance noted. Simple scraping was performed for 14 patients, and excision and scraping was performed for 26 patients. Notable changes in Redness, Swelling, Heaviness, Pain, and Itching at the postoperative site were evaluated. Within 15 days of treatment, Improvement was seen in signs and symptoms of Chalazion as 80% in Pain, 77.5% in Redness, 97.5% in Heaviness, 87.5% in swelling and 92.5% in Itching.

The resolution rate of surgical treatment was significant at 87.5% (35/40) ($P < 0.001$). After 5 days from the procedure, Chalazion had resolved in 18 (45%) cases. 8 (20%) cases resolved after 2 weeks, another 10 (25%) Chalazion resolved after 3 weeks (in that 1 patient complained development of new adjacent lesions). In spite of improvement, 4 patients (10%) complained of recurrence. Among the four cases of recurrence, one patient reported as repeated incidence of recurrence with irregular menstruation, and this was assumed to be

under hormonal influence, one case due to uncontrolled diabetes (which is diagnosed later days), and theremaining two cases were assumed to occur due to the ongoing inflammation in the postoperative period.

Figure 1: Before Treatment

Figure 2: After Treatment

Figure 3: Before Treatment

Figure 4: After Treatment

Discussion

The results of this study suggest that the majority of patients were satisfied with treatment of *Lekhanakarma* followed by postoperative care. Chalazion can be correlated with *Utsangini* when it developed in lower lid and *Lagana* when it developed in upper lid. *Susrutha* has enlisted *Utsangini* and *Lagana* under the *Varthmagatha roga* by considering eyelids[6]. He mentioned 21 eyelid disorders out of 76 types of eye diseases[7,8].

In this current study, most of the patients were noticed expose to dust near the home, shop, institution or at school. As for sites of Chalazion formation, the upper lid was more prevalent. The Chalazion size range 4 mm to 8 mm. No relationship between Chalazion size and recurrence was found. The treatment of Chalazion consists of frequent daily use of warm compresses, eyelid hygiene, and topical anti-inflammatory medications in the acute inflammatory phase. Antibiotic therapy may be necessary in case of a secondary bacterial infection. Simple excision has been reported to have a higher rate of recurrence. Because of this, surgical excisions are combined with adjunct therapies. Goenvall[9] found that Chalazion most often involves the upper eyelids and explained by the presence of more meibomian glands in the upper eyelid.

The roughness of the upper surface of the leaf is so pronounced that leaf of *Parijata (Nyctanthes arbortristis L.)* is used as a sand paper in parts of India where it is indigenous[10]. Due to this rough surface delicate eyelid is scraped and impure blood and pus is escaped. Pure blood is circulated and healthy tissue is developed soon. Because of this *Susrutha* used such type of leaves (*Parijata, Gojihva*) for scraping[11]. After the procedure *Pratisarana* was done with paste made with one pinch of *Sodhita Kasisa (Ferrous sulphate), Pippali (Piper longum L.), Saindhava (Rock salt)* and two drops *of Madhu (Honey)*. These drugs having anti-inflammatory effect, *Vranaropana* effect etc. *Seka* was done with *Triphalakasaya* and wrapped with plain *Ghrita (Ghee)*. *Triphala* is having Anti-inflammatory, wound cleaning activity, wound healing activity, Anti-oxidant activity etc. These plant based formulations with zero side effects are safer clinically than the steroid and penicillin based eye drop formulation with various side effects[12]. Patients were recommended to take rest for 3 days after the procedure. Oral medicines are recommended for reduce pain and inflammation. Patients were reviewed after 24 hours bandage removed, observed the appearance. Most of the cases redness was present with slight swelling. *Triphalakasaya Seka* was done for 3 days in the operated eye to reduce the inflammation and infection. After 5 days from the procedure, Chalazion had resolved in 18 (45%) cases. 8 (20%) cases resolved after 2 weeks, another 10 (2.5%) Chalazion resolved after 3 weeks. Most of the cases were got good results in 5 days.

Conclusion and Future study

Lekhanakarma technique is safe, simple, and less time consuming, cost effective procedure with negligible recurrence. The present study shows satisfactory treatment outcomes through adjuvant therapies and continuous monitoring of the clinical course. An average overall improvement for all patientswas found to be 87.5%. Further studies are warranted to clarify efficacy in large group and mode of action.

Conflict of interest:

No conflict of interest.

REFERENCES

1. Duke-Elder S, editor. System of ophthalmology. St Louis Mosby. 1974; 242-247.
2. Abboud A, Osman D, Massoud M. Eyelid chalazion. Exp Eye Res. 1968; 7: 388-389.
3. Driver PF, Lemp MA. (1996). Meibomian Gland Dysfunction. SurvOphthalmol. 40: pp. 343-367.
4. Cottrell DG, Bosanquet RC, Fawcett IM. (1983). Chalazions: the frequency of spontaneous resolution. Br Med J (Clin Res Ed). 287: 1595.
5. AmynahGoawalla, Vickie Lee. (2007). A prospective randomized treatment study comparing three treatment options for chalazian: triamcinolone acetonide injections, incision and curettage and treatment with hot compresses, Clinical and Experimental Ophthalmology. 35:706–712.
6. Susrutha. Sushrutasamhita, Shri Dalhanacharya virachita nibhandhasangraha vyakhyaya, Uttarastana, Chapter 3 verse 9, Jadavji Trikamji, Sharma PV, editors. Choukambha orientalia, Varanasi, Edition: reprint 2012; 599.
7. Susrutha. Sushrutasamhita, Shri Dalhanacharya virachita nibhandhasangraha vyakhyaya, Uttarastana, Chapter 1 verse 44, Jadavji Trikamji, Sharma PV, editors. Choukambha orientalia, Varanasi, Edition: reprint 2012; 598.
8. Susrutha. Sushrutasamhita, Shri Dalhanacharya virachita nibhandhasangraha vyakhyaya, Uttarastana, Chapter 3 verse 5-8, Jadavji Trikamji, Sharma PV, editors. Choukambha orientalia, Varanasi, Edition: reprint 2012; 599.
9. Groenvall H. (1951). Statistics relating to the occurrence and location of 1693 chalazia. ActaOphthalmol (Kbh). 29: 329-238.
10. Ruth kiew and Pieter bass. (1984). Nictanthes is a member of the Oleaceae, Proc.Indian Acad. Sci.(Plant Sci.). Vol. 93 (3): 349-358.
11. Susrutha. Sushrutasamhita, Shri Dalhanacharya virachita nibhandhasangraha vyakhyaya, Uttarastana, Chapter 13 verse 6, Jadavji Trikamji, Sharma PV, editors. Choukambha orientalia, Varanasi, Edition: reprint 2012; 620.
12. Dolly Singh, Neha Chauhan, S.S.Sawhney, R.M. Painuli, Biochemical characterization of triphala extracts for developing potential herbal drug formulation for ocular diseases, Int J Pharm Pharm Sci. 3(5): 516-523.