Photo Essay

## To know when to prick!!

Nandini Bothra<sup>a</sup>; Mohammad Javed Ali<sup>a,b</sup>; Milind N. Naik<sup>a,\*</sup>

CrossMark

Chalazion is a chronic lipogranulomatous inflammation of the sebaceous glands of the eyelid. Warm compresses with antibiotic/steroid eye ointment form the mainstay of treatment followed by gold standard treatment in the form of Incision and curettage in case of non resolution.<sup>1</sup>

Intralesional injections are a minimally invasive technique when compared to incision and curettage and can ultimately achieve the same results when chosen to be used wisely.

## Comments:

So the question that arises is which case is better suited for intralesional injection. Fig. 1 shows the case which would be ideal for an intralesional injection as opposed to a case where incision and curettage would fare much better.

Cases where intralesional Triamcinolone Acetate (TCA) may be the procedure of choice include 3 "M's" – multiple, marginal and medial (Fig. 2).



Figure 1. (A and B) A chronic chalazion in the left lower lid which shows vascularization with some activity – suitable for an intralesional steroid injection. (C and D) A more chronic non vascularized lesion more amenable to incision and curettage.

Received 25 May 2017; accepted 29 May 2017; available online 14 June 2017.

© 2017 The Authors. Production and hosting by Elsevier B.V. on behalf of Saudi Ophthalmological Society, King Saud University. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). http://dx.doi.org/10.1016/j.sjopt.2017.05.016

<sup>a</sup> Ophthalmic Plastic Surgery Service, L.V. Prasad Eye Institute, Hyderabad, India <sup>b</sup> Govindram Seksaria Institute of Dacryology, Hyderabad, India

\* Corresponding author.

e-mail address: milind@drmilindnaik.com (M.N. Naik).



عملی الملك سع Sud Uniteresty Peer review under responsibility of Saudi Ophthalmological Society, King Saud University



Access this article online: www.saudiophthaljournal.com www.sciencedirect.com



Figure 2. Indications for intralesional injections: (A) multiple, (B) marginal, (C) medial.



Figure 3. TCA injected transconjuctivally till blanching is seen.

Options available for intralesional injections include triamcinolone acetonide (TCA, widely used and accepted), 5-fluorouracil and Botox injection. Technique of injecting intralesional steroids is as shown in Fig. 3. Dosage varies as per the size of the lesion (0.2–0.4 ml). Effect usually becomes apparent in about 2–5 weeks. Multiple injections may be required to achieve the desired effect (usually about two injections suffice).<sup>2</sup> Side effects associated with intralesional TCA include hypopigmentation of the skin (avoided by giving transconjunctival injection). More serious complications include retinal and choroidal vascular occlusion with resultant loss of vision and inadvertent globe perforation, which are rather rare and unlikely to occur with a small dose of eyelid injection. Advantages of TCA injection include the simplicity



Figure 4. Results after single intralesional injection of TCA.

of the procedure, the ability to inject lesions near the lacrimal punctum, and its use as an alternative to surgery in cases of multiple small and marginal chalazia, where surgery may result in permanent functional and aesthetic defects.<sup>3</sup>

Other options like 5-fluorouracil can be used in steroid responsive patients or in patients in whom steroids are contraindicated. Botox is recently found to have use in chalazion as the meibomian glands are partly innervated and controlled by parasympathetic cholinergic pathways, which could decrease glandular secretion causing clinical resolution of chalazion. However, its utility is still debatable. <sup>4</sup> Fig. 4 shows response with single intralesional injection of TCA. Conservative management in the form of warm compresses for a prolonged period of time or repeat intralesional injection can be performed for complete resolution in cases of residual lesion.

## **Conflict of interest**

The authors declared that there is no conflict of interest.

## References

- 1. Lindsley K, Nichols JJ, Dickersin K. Interventions for acute internal hordeolum. *Cochrane Database Syst Rev* 2010;**9**:CD007742.
- Ben Simon GJ et al. Intralesional triamcinolone acetonide injection for primary and recurrent chalazia: is it really effective? *Ophthalmology* 2005;112(5):913–7.
- Goawalla A, Lee V. A prospective randomized treatment study comparing three treatment options for chalazia: triamcinolone acetonide injections, incision and curettage and treatment with hot compresses. Clin Exp Ophthalmol 2007;35:706–12.
- Knezevic T et al. Botulinum toxin A injection for primary and recurrent chalazia. Graefes Arch Clin Exp Ophthalmol 2009;247(6):789–94.