

# TRICHIASIS

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### **Aetiology**

- Inward misdirection of eyelashes towards the cornea, secondary to a number of conditions
- These included Distichiasis, in which lashes grow from the Meibomian gland orifices

### **Congenital**

- Due to failure of epithelial germ cells to differentiate completely to Meibomian glands; autosomal dominant inheritance

### **Acquired**

- Metaplasia of Meibomian glands leading to abnormal growth of lashes is usually secondary to severe chemical burn, Stevens-Johnson syndrome, Ocular Cicatricial Pemphigoid, or chronic blepharoconjunctivitis

### **Predisposing Factors**

- Staphylococcal blepharitis
- Trachoma
- Cicatricial conditions (Stevens-Johnson disease, Ocular Cicatricial Pemphigoid, chemical or mechanical trauma)
- Herpes zoster ophthalmicus
- Entropion of any cause

### **Symptoms**

- Ocular discomfort, irritation, foreign body sensation affecting one or both eyes (*NB: in the elderly and in diabetics, corneal sensitivity may be reduced*)
- Watery eye
- Red eye



## Signs

- Lash or lashes in contact with ocular surface
- Conjunctival injection
- Corneal epithelial abrasion
- Fluorescein staining of cornea and/or conjunctiva
- Long-standing complications
  - pannus
  - corneal ulcer
  - infective keratitis

## Differential Diagnosis

- Other causes of ocular irritation / red eye

## Management by Optometrist

### Non-pharmacological

- Epilation: remove lash(es) with forceps. Lash(es) will re-grow within 4-6 weeks, therefore epilation may need to be repeated
- If due to entropion, tape the eyelid for temporary relief of symptoms
- Consider therapeutic contact lens (silicone hydrogel soft, rigid limbal or rigid scleral) for temporary relief of symptoms
- Advise patient to seek further help / return if symptoms persist or recur

### Pharmacological

- Ocular lubricants for symptomatic relief (drops for use during the day, unmedicated ointment for use at bedtime)

*NB Patients on long-term medication may develop sensitivity reactions which may be to active ingredients or to preservative systems (see Clinical Management Guideline on Conjunctivitis Medicamentosa). They should be switched to unpreserved preparations*

- Lid hygiene for associated blepharitis

### Management category

- **B2: Alleviation/palliation: normally no referral**  
Refer to ophthalmologist if management unsuccessful



### **Possible Management by Ophthalmologist**

- Electrolysis: destruction of lash follicle by passing electric current into lash root. Suitable for single or small numbers of lashes. May require multiple treatments
- Cryotherapy: nitrous oxide cryoprobe eliminates large numbers of lashes; may cause skin depigmentation
- Therapeutic contact lenses in severe trichiasis, as temporary measure before surgery or as definitive management if patient refuses surgery
- Treatment of predisposing ocular conditions
- Lid surgery if trichiasis secondary to entropion

### **Evidence Base**

- Yorston D, Mabey D, Hatt S, Burton M. Interventions for trachoma trichiasis. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD004008. DOI: 10.1002/14651858.CD004008.pub2  
Authors' conclusion: No trials show [that] interventions for trichiasis (in cases of trachoma) prevent blindness. Certain interventions have been shown to be more effective at eliminating trichiasis. Full thickness incision of the tarsal plate and rotation of the lash-bearing lid margin through 180 degrees is probably the best technique  
(Centre for Evidence-based Medicine Level of Evidence = 1a)
- Case Series:  
Johnson RLC, Collin JRO: Treatment of trichiasis with a lid cryoprobe. Brit J Ophthalmol 1985; 69: 267-70  
(Centre for Evidence-based Medicine Level of Evidence = 4)