

Optical correction of refractive errors in Ocular surface dermoids and lipodermoids

Dr Sunil Moreker and Dr Harshvardhan Ghorpade

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Limbal Dermoid/Lipodermoid astigmatism cant be treated with contact lenses

Seeing is believing ...not just immediate post op but through the years...

The children continue seeing years later

Ocular surface dermoids/lipodermoids have visual abnormalities even after surgery and need more than proper glasses and contact lenses. But at times one may have to do corrective refractive laser. Corneal topography , Pentacam and aberrations need attention to prevent amblyopia or aberropia post correction and long term corneal moulding needs to be kept in mind especially in children in growing age group and if that's managed amblyopia can be prevented

Introduction :The long-term refractive and visual results of amblyopia correction following surgical therapy of patients with corneal dermoid and lipodermoid with regard to amblyopia is lacking in literature.

The goal of the poster

Long term vision improvement and amblyopia/aberropia management in children

Methods

Study Design :Prospective observation

Sample Size N=12

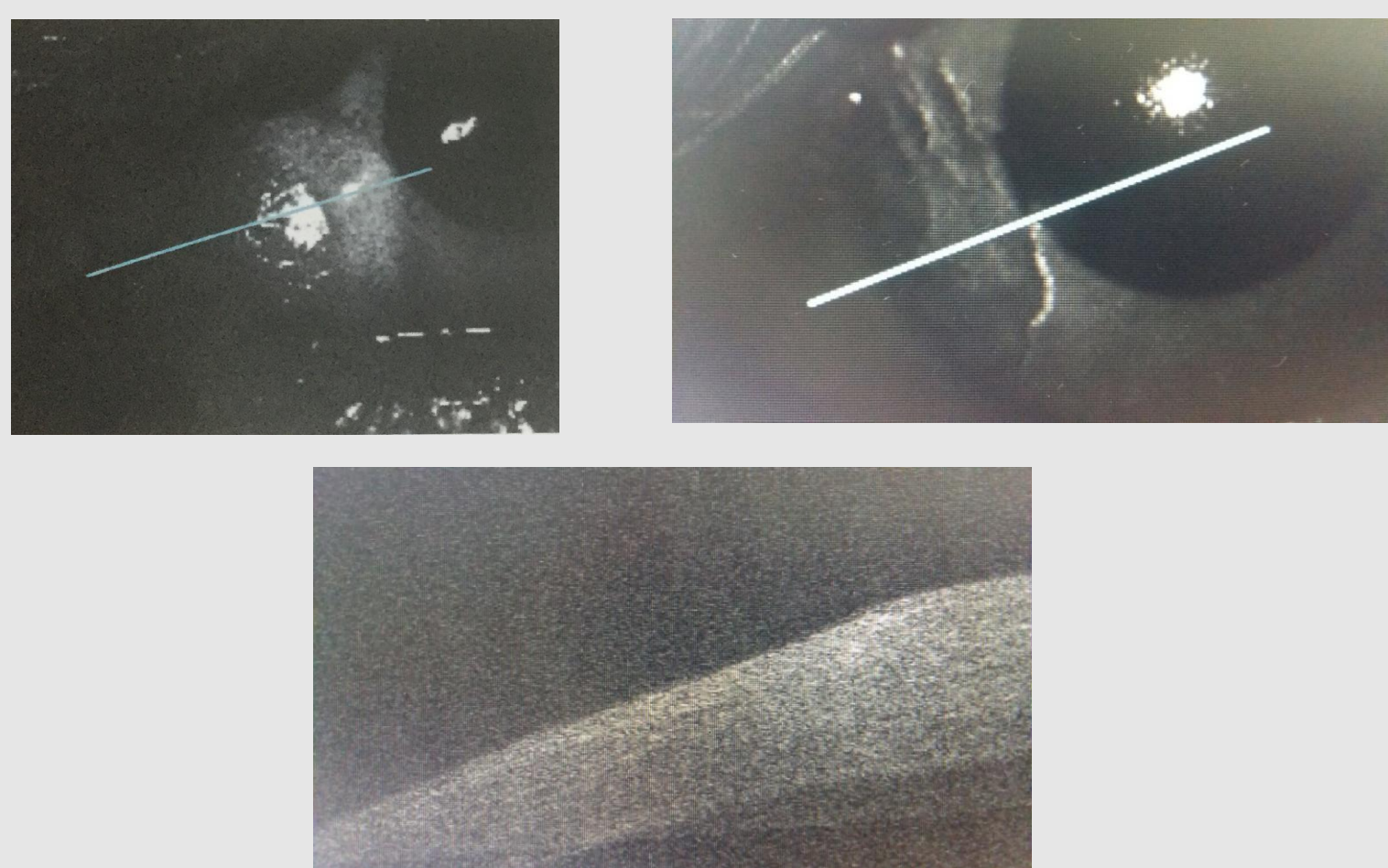
Subject population :

Inclusion Criteria : dermoid, subconjunctival lipodermoid with amblyopia not responding to patching ,penalisation

Exclusion Criteria: Lenticular astigmatism

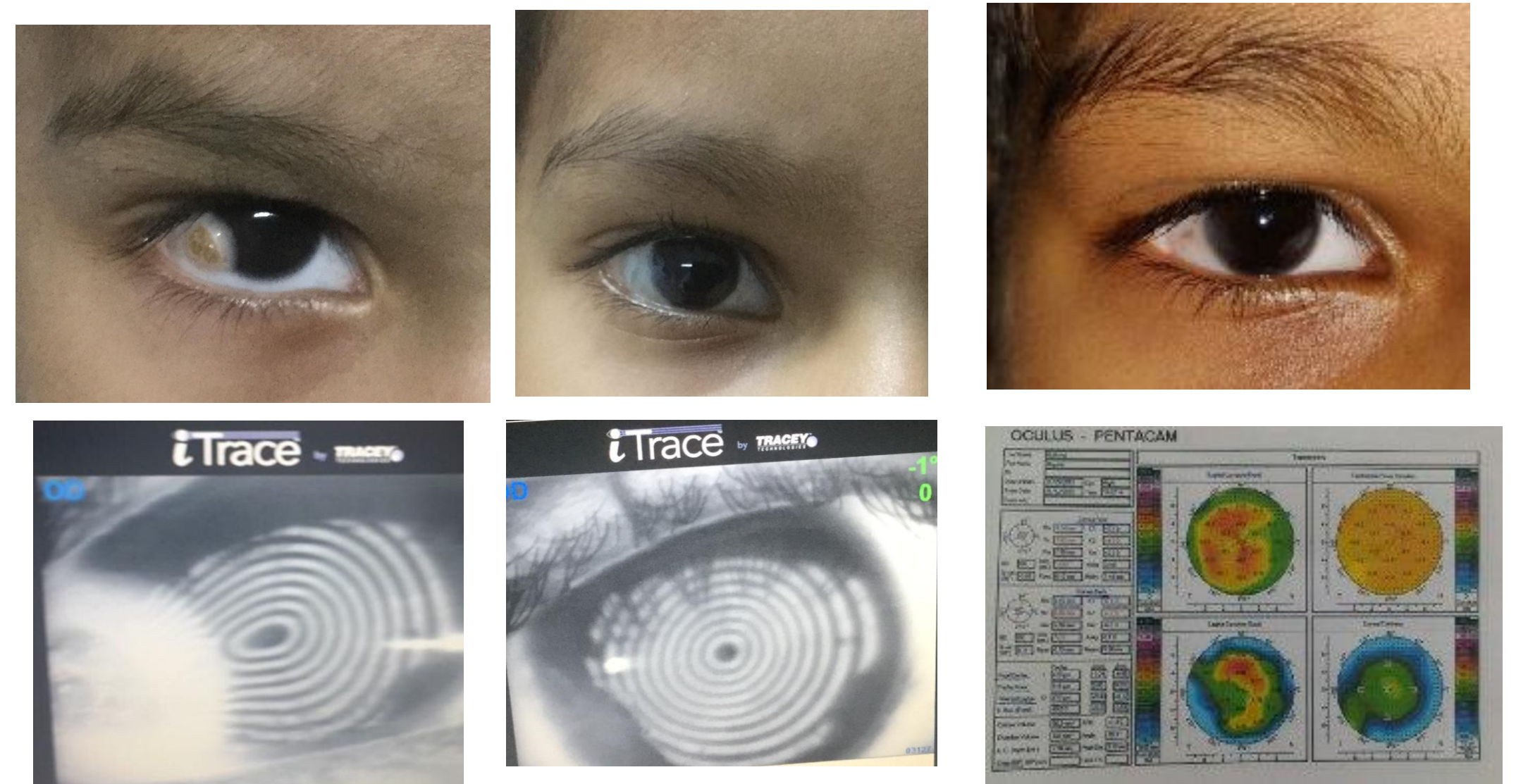
Intervention :Surgical therapy followed by refractive, optical and amblyopia correction , optical correction with glasses/contact lenses

Mean follow up :- 3.7 years +/- 1.2 years.



Anterior segment OCT guided excision/ablation of mass sometimes just enough to allow a contact lens

Eg:-pre operative ,immediate post operative and six years



Pre op and post op clinico i Trace and post 6 year Pentacam

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Pre



post 6 yr Operated right / untouched left



Results

Average presentation age : 3.5 +/- 1.4 years

Sex ratio M:F=2:1

A significant correlation between size and preoperative log visual acuity. (p=0.002)

Odds ratio :Amblyopia more in patients with preoperative hypermetropia of > / = 2 dioptrres and astigmatism > / = 2 dioptrres.

9 patients visual correction by four lines , 2 one line and one no improvement .All needed lenses

Discussion :-

Our results (n=12)are contrary to that of Robb et al (1) (n=17)who suggested that preoperative astigmatism persists postoperatively with little change in its orientation or amount regardless of age at the time of surgery. But we agree minus cylinder coincides with location of dermoid

References :-1) Robb RM. Astigmatic refractive errors associated with limbal dermoids. JPediatr Ophthalmol Strabismus. 1996 Jul-Aug;33(4):241-3.