



Figure 2 *In-vivo* confocal microscopy images of the (a–c) right eye and (d–f) left eye.

changes in the left eye. The patient was asymptomatic and did not have symptoms of photophobia, recurrent erosions, or reduced vision. He did not have a family history of corneal dystrophies and did not have any systemic illnesses. His best corrected visual acuity was 6/5 in the right eye and 6/9 in the left eye. Slit lamp examination of the cornea revealed lattice dystrophy in his left eye (Figure 1b), but no abnormalities in the right eye (Figure 1a). He had normal corneal sensation and an intact corneal epithelium. The remainder of the eye examination was normal. Both eyes were examined using IVCM.

IVCM was performed with the Heidelberg Retinal Tomograph Rostock Cornea Module (Heidelberg Engineering GmbH, Heidelberg, Germany). The linear branching hyper-reflective deposits were seen in both eyes. The left eye had larger and more intense deposits with blurred margins (Figures 2d–f), whereas the right eye had less intense thinner lattice-shaped branching hyper-reflective deposits with more defined margins (Figures 2a–c).

Comment

Lattice corneal dystrophy is usually a bilateral condition that is commonly asymmetric. Rarely, it has been reported to occur unilaterally. In our patient, the clinical diagnosis of lattice corneal dystrophy in the left eye was supported by the IVCM findings. In the right eye, the most plausible explanation for the IVCM findings is that of preclinical amyloid deposition (not seen on slit-lamp examination).

As far as we are aware, IVCM has previously not been reported to show changes suggestive of lattice dystrophy in a clinically unaffected eye.

Conflict of interest

The authors declare no conflict of interest.

Reference

- 1 Kobayashi A, Fujiki K, Fujimaki T, Murakami A, Sugiyama K. *In vivo* laser confocal microscopic findings of corneal stromal dystrophies. *Arch Ophthalmol* 2007; **125**: 1168–1173.

A Kailasanathan and S Maharajan

Queens Medical Centre, Department of
Ophthalmology, Nottingham, UK
E-mail: senthil.maharajan@nuh.nhs.uk

Eye (2013) **27**, 991–992; doi:10.1038/eye.2013.80;
published online 3 May 2013

Sir,
Aplasia cutis congenita of eyelid: case report

Aplasia cutis congenita (ACC) is a rare, congenital defect of the skin, which mostly affects the scalp and the trunk. The main complications include bleeding and infection. We present a rare case of ACC that involved solely the eyelid and confirms the effectiveness of conservative therapy.

Case report

A Chinese female neonate was referred to us because of skin and lash defect in the upper eyelid with a granulation tissue at the base at birth (Figure 1a). She was a full-term otherwise healthy baby delivered by



Figure 1 The defect of the left upper eyelid at birth (a) and massive purulent discharge in the conjunctiva sac on the second day (b). The mass disappeared in 1 month, leaving a small defect in the lid margin but an intact tarsus (c). Twenty-four months after birth, she looked normal at the primary gaze (d) but revealed a lid margin defect only at the down gaze (e).

caesarean section. On the second day of the birth, there was a lot of ocular discharge and the granulation became scabby (Figure 1b).

The smear and culture of the discharge at the conjunctiva sac showed *Staphylococcus aureus*, which was sensitive to tobramycin, ampicillin, and a series of antibiotics. We thus applied tobramycin eye drops every 2 h during the day time and tobramycin ointment at night and removed the scab every day. Two weeks later the eye became clean. The granulation tissue diminished with time and disappeared in 1 month, leaving a small defect in the lid margin but an intact tarsus (Figure 1c). Two years after birth, the child grew up healthy without any other abnormality. The defect in the lid margin was not apparent at the primary gaze (Figure 1d), but revealed a lid margin defect only at the down gaze (Figure 1e).

Discussion

Aplasia cutis congenita (ACC), first described by Cordon and Campbell in 1767, is a rare congenital disorder of the skin characterized by the absence of a portion of skin present at birth. The incidence is between 0.5 and 1 per 10 000 newborns.¹ The scalp and the trunk are the commonly affected places, whereas the eyelid is seldom involved.^{1–3} The aetiology of this condition remains unclear, although numerous theories have been proposed. These theories include genetic factors, intrauterine trauma, developmental anomalies, and teratogens.^{1,4}

According to our literature review, this is the first case report of ACC that involves solely the eyelid.^{1–5} As reported herein, conservative treatments are sufficient if directed to preventing and controlling microbial infection

at the early stage. Ocular plastic surgery was not necessary because the tarsus was intact and the eye could completely be closed to avoid the risk of exposure keratitis.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Caputo R, Bernard AA, Siston-Torre EQ. *Pediatric Dermatology and Dermatopathology*. Lea & Febiger Press: Philadelphia, PA, USA, 1990; 165–168.
- 2 Ahcan U, Janezic T. Management of aplasia cutis congenita in a non-scalp location. *Br J Plast Surg* 2002; **55**: 530–532.
- 3 Loreti A, Bracaglia R, Selvaggi G, Lahoud P, Sturla M, Farallo E. Aplasia cutis congenita: report of four cases and literature review. *Eur J Plast Surg* 2004; **27**: 114–119.
- 4 Bian Z. *Clinical Dermatology*. China JiangSu Science & Technology Publication, 1998; 1073–1074.
- 5 Leung RSC, Beer WE, Mehta HK. Aplasia cutis congenita presenting as a familial triad of atrophic alopecia, ocular defects and a peculiar scarring tendency of the skin. *Br J Dermatol* 1998; **118**: 715–720.

Y-Y Gao¹, T-X Xu² and H-X Zhao¹

¹Department of Ophthalmology, the Second Affiliated Hospital, Fujian Medical University, Quanzhou, Fujian, China

²Department of Dermatology, the Second Affiliated Hospital, Fujian Medical University, Quanzhou, Fujian, China
E-mail: gaoyingying@gmail.com

Eye (2013) **27**, 992–994; doi:10.1038/eye.2013.104;
published online 24 May 2013

Sir,
Laser barrage anterior to ridge in threshold ROP-caveat

We read with interest the study by Ells *et al.*¹ The authors have succinctly highlighted the role of laser posterior to the neovascular ridge in severe retinopathy of prematurity (ROP) in a select group of patients.

Ells *et al.*¹ have themselves highlighted some of the limitations in their study. In addition, we feel, they could have nuanced the study findings.

Confluent laser treatment to larger avascular retina in Zone II ROP is likely to be more beneficial than secondary treatment to a small strip of vascular posterior retina while allowing skip areas in the avascular retina.² We reckon that posterior laser to vascular retina should be considered as a last resort after treatment to avascular retina has been completed. This, especially, should be the case with the temporal retina in Zone II, where the macula shows temporal traction and accurate laser posterior to ridge is fraught with the risk of macular laser/foveal laser in an awake infant. In this regard, the 'safer zones' for such laser would be nasal, superior, and inferior. This could be a practical point of consideration for clinicians treating ROP.

Also it would be an overstatement to infer that laser treatment posterior to ridge results in rapid regression of ROP as the authors conclude. We have not seen this in the present study findings, and the progression of two eyes to retinal detachment belies the claim.

We agree with the authors that posterior retinal laser is a safe option of ROP treatment and it may have a role in reducing the chances of retinal detachment, but that remains to be proven with controlled trials.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Ells AL, Gole GA, Lloyd Hildebrand P, Ingram A, Wilson CM, Geoff Williams R. Posterior to the ridge laser treatment for severe stage 3 retinopathy of prematurity. *Eye (Lond)* 2013; **27**(4): 525–530.
- 2 Banach MJ, Ferrone PJ, Trese MT. A comparison of dense versus less dense diode laser photocoagulation patterns for threshold retinopathy of prematurity. *Ophthalmology* 2000; **107**(2): 324–327.

M Uparkar¹ and S Kaul²

¹Vitreo-Retina Services—Vasan Eye Care Hospital, Navi-Mumbai, Maharashtra, India

²Pediatric Ophthalmology and Strabismology Services—Vasan Eye Care Hospital, Navi-Mumbai, Maharashtra, India
E-mail: uparkar@gmail.com

Eye (2013) **27**, 994; doi:10.1038/eye.2013.71;
published online 17 May 2013

Sir,
Response to Dr Uparkar and Dr Kaul

We thank Drs Uparkar and Kaul for their correspondence¹ with regard to our paper on laser photocoagulation, posterior to the neovascular ridge in infants with severe subgroup of Type I retinopathy of prematurity.²

In addressing the suggestion that confluent secondary laser treatment be applied anterior to the ridge, we wish to confirm that all of these infants did receive laser to the avascular anterior retina and to all skip areas in addition to laser posterior to the ridge.

We agree with Drs Uparkar and Kaul that posterior laser should be considered with great caution; however, all of our infant eyes represented a very severe form of Type I ROP and were treated under general anesthesia where there was maximum control of laser application within the temporal arcades. Minimal temporal arcade traction was permitted in our treated eyes, as we commonly observe this feature in eyes with severe Type I ROP prior to treatment; however, a minimum distance of 3000 μ m (two disc diameters) between the fovea and temporal ridge was required in order to minimize potential complications of posterior laser.

Two eyes in this 3-year series progressed to 4A retinal detachment and required further intervention, however 89% of eyes did not go on to stage 4 retinal detachment and experienced regression within 1 week, which we consider to be a rapid regression of very severe disease after laser treatment. Lepore and colleagues³ report fluorescein angiography cases with avascular loops, which exist posterior to the ridge, and hypothesize that these ischemic posterior retina areas may contribute significantly to the production of VEGF. We also hypothesize that additional laser to these posterior ischemic retina areas may facilitate regression of neovascularization in this subgroup of infants with very severe zone II, stage 3 ROP.

We describe clear morphological criteria for consideration of posterior laser in a group of premature infant eyes with very severe Type I ROP, which may halt progression of the disease and minimize visual loss from cicatricial macular changes or avoid advancement to stage 4 or 5 ROP warranting vitreoretinal surgery.

Conflict of interest

The authors declare no conflict of interest.