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DTL Quek^{1,2}, T Barkham³ and SCB Teoh¹

¹Department of Ophthalmology, The Eye Institute, Tan Tock Seng Hospital, Singapore

²Singapore National Eye Centre, Singapore

³Department of Pathology and Laboratory Medicine, Tan Tock Seng Hospital, Singapore
E-mail: desmondq@gmail.com

Eye (2009) **23**, 1471–1472; doi:10.1038/eye.2008.149;
published online 6 June 2008

Sir,
Photorefractive keratectomy in iris and choroidal coloboma using Pulzar Z1 solid-state technology from Customvis, Australia

Reduced corneal diameter and peripheral corneal changes similar to aniridia^{1–3} can occur in iris coloboma. We present a case of iris coloboma in which photorefractive keratectomy (PRK) was performed.

Case report

A 22-year-old female patient presented with refraction of $-9.25/-0.50 \times 70$ (6/6) in the right eye and $-3.00/-1.00 \times 170$ (6/6) in the left eye. The right eye was within the normal limits and the left eye revealed typical inferonasal iris coloboma. Retinal evaluation revealed an inferonasal choroidal coloboma. An additional small island of choroidal coloboma was present.

The average keratometry values showed 44.97 D in the right eye and 43.80 D in the left eye using iTRACE (Tracey Technologies, TX, USA). The corneal thickness was 498 μm in the right eye and 548 μm in the left eye. Corneal diameter in the right eye was 11.0×11.5 mm and in the left eye was 10.0×10.5 mm.

In the right eye, LASIK was performed with a flap of 8.5 mm and an optic zone of 5.5 mm. The residual bed after ablation was 270 μm in the left eye. PRK was performed using the Pulzar Z1 small 0.6 mm Quasi Gaussian beam, with fast closed-loop eye tracking and advanced solid-state scanning technology. The epithelium was debrided mechanically and was found to be very loose. Ablation was performed with a 0.6-mm spot size laser centred on the visual axis. An optic zone of 6.5 mm and a transitional zone of 8 mm were utilized.

The ablation was centred to visual axis. Mitomycin-C 0.02% on a sponge was applied for 1 min. A bandage contact lens was applied.

Routine post-operative care was given. The patient attained an unaided visual acuity of 6/6 in both the eyes at the end of 2 months. Trace haze was seen in her left eye.

Discussion

We present this case to highlight that PRK would be a useful option in patients with iris and choroidal coloboma. In the left eye of this patient, PRK was decided because of the risk of LASIK flap-related complications in view of the corneal diameter being smaller and the overall abnormal contour of the anterior segment. There may be risk of stem cell damage with the suction ring aggravating corneal vascularization. Loose epithelium, as it happened in this case, may predispose to decreased flap adherence and increased risk of diffuse lamellar keratitis.

The problems that we encountered in this patient were loose corneal epithelium and difficulty in identifying the centre of the pupil. Ablation was centred on the visual axis with a large optic zone.

The visual results of this patient were very good, 6/6 at the end of 2 months. Trace haze was seen, though it is our experience to not see a haze in low-to-moderate myopia using spot laser and mitomycin C.

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MS Sridhar¹, P Kotamarthy¹ and T Pujara²

¹SRIVISION eye hospital, Jubilee Hills, Hyderabad, India

²CUSTOMVIS, Australia

E-mail: sri.vision@yahoo.co.in

Eye (2009) **23**, 1472; doi:10.1038/eye.2008.233;
published online 25 July 2008

Sir,
Jarisch–Herxheimer reaction: paradoxical worsening of tuberculosis chorioretinitis following initiation of antituberculous therapy

Jarisch–Herxheimer reaction (JHR) describes paradoxical worsening following chemotherapy. Here, We report a case of JHR comprising retinal vasculitis and vitritis following initiation of antituberculous therapy (ATT).