We read with interest the article titled “Selective Laser Trabeculoplasty as Primary Treatment for Open-Angle Glaucoma” by Melamed et al.1 We congratulate the authors for providing substantive evidence on the efficacy and safety of selective laser trabeculoplasty (SLT). We would like to point out, however, that this evidence regards only the first 3 postoperative months, since an increasing number of patients were lost to follow-up thereafter (Figure 2). Although the authors report a mean postoperative follow-up period of 11 months, this is slightly misleading, as only 38% of the treated eyes (17/45) were observed for 12 months.

We would also like to comment on the study’s methodology. The authors state that an intraocular pressure (IOP) of 23 mm Hg or greater in 2 consecutive measurements was 1 of the inclusion criteria. They do not mention if IOP was measured by applanation tonometry or another method, the interval between these 2 measurements, at what time of the day they were recorded, and if the postoperative measurement was made at the same time of day so as to rule out diurnal variations that might mask the effect of treatment. We feel that this information is important, since the efficacy of SLT is essentially shown by its effect on IOP.

Finally, the authors state that SLT may theoretically be repeated, as the SLT-treated trabecular meshwork has shown no evidence of coagulative damage, and that SLT may result in additional reduction in IOP. It would have been interesting if they had reported any attempt to retreat their patients in whom SLT was unsuccessful or insufficient in reducing IOP adequately.

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Selective Laser Trabeculoplasty: Duration and Magnitude of Intraocular Pressure Reduction

We would like to thank Drs Mataftsi and Horgan for their interest in our article and their valuable remarks. As for the specific issues raised:

Because glaucoma is a slowly progressive chronic disease, it is widely accepted that any study evaluating a real effect on glaucoma patients should be extended for at least several years. However, as we all have learned to appreciate the importance of intraocular pressure (IOP) reduction in patients with glaucoma, we strongly believe that even an interim study of IOP response during a mean follow-up of 11 months is worth reporting.

Intraocular pressure was measured in our study by applanation tonometry. Two measurements were taken by the same ophthalmologist, 1 minute apart, and the average IOP value was calculated. All measurements were made between 9 AM and 10 AM, both prior to selective laser trabeculoplasty (SLT), and at all time intervals postoperatively.

 Gonioscopy in all treated eyes revealed no coagulative damage to the trabecular meshwork or peripheral anterior synchiae formation. The use of SLT repeatedly in failed treatments may have an intriguing theoretical advantage, but we have only a few patients with 2 sessions of SLT. In addition, we have just 2 patients who had a brisk response to SLT in 2 sessions and in whom a third treatment was performed. In both cases, IOP was markedly reduced, but it is too early to draw any conclusion.

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Variable Expression of Ophthalmological Findings in the 13q Deletion Syndrome

With great interest we read the photo essay by Schocket et al2 with a useful summary of the general and ophthalmological findings in the 13q deletion syndrome.

We have treated a patient with a large interstitial deletion of 13q13-q32 who also had familiar malformations associated with the 13q deletion syndrome. The key ophthalmological finding in our particular patient, however, was a unilateral uveal coloboma combined with retinoblastoma. The other eye remained normal after 4 years of follow-up.

Several reports on the combination of retinoblastoma and coloboma have been published. In one of them, Brown et al3 suggested that mutations specifically in region q32 on chromosome 13 could be responsible for various nonocular and some ocular malformations, like microphthalmia, coloboma, or aniridia.

The patient discussed in the essay by Schocket and colleagues as well as our patient both had a deletion encompassing region q32. However, it is remarkable that our patient has exhibited only unilateral ocular manifestation up to the present. This unilateral pattern of malformations has been described only once before. Another common finding evident in the described case and in our patient is that both appear to have a hearing defi-
cit. Until now this phenomenon is unusual in the reports of the 13q deletion syndrome.3

In this patient, brainstem audiometry at the age of 4 months revealed a severe bilateral hearing loss. Subsequent otologic and audiologic assessment indicated a major sensorineural component. Hearing loss deserves more attention within this patient group, since the impaired mental development could be partially explained by this additional lack of sensorineural information. Early adequate intervention by means of hearing rehabilitation, counseling, and support services is mandatory because visual impairment is already present. The combination of retinoblastoma and coloboma in our patient caused a challenging diagnostic and therapeutic difficulty in differentiating fibrovascular changes inside the coloboma from active retinoblastoma tissue. After several years of follow-up, this tissue did not show any change and we diagnosed it to be fibrovascular tissue.

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In reply

We appreciate the comments from Dr Lansink and colleagues regarding our photo essay on the 13q deletion syndrome.1 As outlined previously, the manifestations of this syndrome can include growth and mental retardation, holoprosencephaly, microcephaly, retinoblastoma, coloboma, microphthalmia, hypertelorism, large and low-set ears, prominent nasal bridge, cardiac defects, gastrointestinal and urogenital malformations, and distal limb anomalies.2

We agree with Dr Lansink and colleagues that it is interesting that both patients had a hearing deficit yet this has not been reported as a typical manifestation of the 13q deletion syndrome. Further review of the literature reveals that the auditory pigmentary disorder Waardenburg-Shah syndrome has been mapped to the endothelin B receptor gene on 13q22. The existence of a contiguous gene syndrome involving genes necessary for the normal development of the neural crest derivatives of the eye, inner ear, and colon has been suggested.3,4

The 2 cases differ in that our case demonstrated bilateral findings, whereas that of Dr Lansink and colleagues revealed a unilateral coloboma with retinoblastoma. The recognition that genetic diseases such as retinoblastoma and coloboma may be unilateral has been of great interest to all of us.

Again, we thank Dr Lansink and colleagues for sharing their case.

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Periocular Chemotherapy for Retinoblastoma: Success With Problems?

I read with interest the article on ocular motility changes after subtenon carboplatin chemotherapy for retinoblastoma.1 It is important that complications of this technique be reported so that physicians worldwide can assess the relative risks and benefits of the procedure. The article is encouraging in that 12 advanced eyes were treated with this technique, and the authors reported no active tumor in 8 of the 12 eyes. This is a wonderful affirmation of the success of this local approach in eyes with retinoblastoma.

The authors did not report whether any of these eyes had had previous treatment. Certainly, previous cryotherapy or the use of radioactive plaques could also affect motility and scarring. While I am certain that some of their findings relate to the carboplatin injection, it is my suspicion that some of the motility changes are related to the technique the authors used. When we introduced this technique,2 we specifically avoided opening the conjunctiva to place the cannula back and preferred to do this through a 25-gauge needle injected periocularly. The authors’ technique here involved an incision in the conjunctiva and Tenon fascia in the quadrant of the tumor. Because their patients had between 1 and 6 injections, it is probable that much of the scarring here is related to opening the eye multiple times and not just to the chemotherapy.3

Ultimately, the physician’s decision to use carboplatin must weigh the risks and benefits and be discussed with the family. The fact that the majority of these hopeless eyes were cured with periocular carboplatin avoiding all the systemic toxicity of systemic chemotherapy is reassuring.

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