

to ask additional questions. When the patient sees TAHITI completed, he or she seems reassured and well apprised of the best and worst that could occur. Thus, we feel confident that the risks and benefits of the procedure have been appropriately communicated. Further, the use of this mnemonic addresses the patient's potential "cognitive dissonance"¹ associated with the procedure. The mnemonic can also serve as a simple checklist for trainees in ophthalmology.

This simple process of risk consent may avoid what could be an overwhelming, confusing, and labor intensive standard for the British NHS patient.

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REPLY: The comments by Borovik et al. about their consent process, including the TAHITI approach, broadens the knowledge base for health professionals across the world and illustrates the diversity and common practices in the ophthalmic community.

Although the TAHITI approach is a good mnemonic, which may be a valuable tool for training health professionals, we have some concerns about its use to communicate the risks of cataract surgery to patients. Such detailed mental reinforcement of the negative associations of cataract surgery by the use of a mnemonic may provoke more cognitive stress when associated with one of the most common and successful operations in the world. Reinforcement of this paradox would actually lead to more cognitive

dissonance when the association of successful surgery with TAHITI is made.

We take a more simplistic approach to convey a balanced paradox by reiteration (for mental reinforcement) of the sentence: "There is a 99% chance of better vision following surgery and a 1% chance of major complications." Patients are directed to the information leaflet for the complete reference list of risks and benefits. Discussion of surgery does, of course, take place in a manner similar to that described by Borovik et al., but rather than using a mnemonic, explanation of risk is done via similar structured discussion.

The TAHITI model may also be more negative than need be. The use of the first "T" representing "the terrible 1%" is not clear, as infection and death from anesthesia are included elsewhere in the mnemonic. If "T" is "the terrible" in reference to "AHITI," we question the inclusion of mild complications such as conjunctival hemorrhage or anterior uveitis, which occur more frequently. Spread of local anesthetic to the central nervous system after needle eye blocks has been well described, and although the evidence may never be based on a randomized, double-blind, and prospective comparison,¹ we routinely use non-needle blocks such as topical or sub-Tenon's anesthesia, which we think are safer.

The demand for "one-stop" cataract assessment with its obvious benefits is increasing in the United Kingdom. Following assessment by the doctor, the patient is able to leave the consultation with the information leaflet and have time for consideration, then give written informed consent with the nurse practitioner following further discussion of their concerns together with any logistical issues. The act of signing the consent form is often seen as the single most important step in consent, but written consent merely serves as evidence of consent; although completion of a consent form in the UK is standard best practice, in most cases, it is not a legal requirement.—*Rajan Bhojwani, FRCOphth, Bertie Fernando, MRCS, FRCOphth, Meyyammai Mohan, FRCOphth, DO*

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Risk for ectasia with LASIK

I would like to address some points in the recent article by Condon et al.¹ on the risk for ectasia in patients with a history of laser in situ keratomileusis (LASIK) for high myopia.

First, the authors mentioned that only 50% of the patients who had LASIK for high myopia were studied and only 19% had follow-up examinations after

9 years. These figures are too low to conclude that LASIK for high myopia is a safe procedure, as the authors claimed. Unfortunately, patients with poor results change their physicians to seek better outcomes. Some do not trust their primary surgeon, and some are lost to follow-up because they live too far from the excimer laser clinic.

Second, the authors mentioned that the highest refractive correction was for -35.0 diopters (D). If the average flap thickness was $160\ \mu\text{m}$ and only $12\ \mu\text{m}$ was ablated for each diopter of refractive error (I think it may be greater with the old broad-beam excimer laser), the sum of the flap thickness would be $580\ \mu\text{m}$ and the residual corneal stromal bed will be almost zero, an unbelievable issue.

Third, the authors did not pay enough attention to corneal biomechanics, which seems to have a major role in guaranteeing adequate resistance against ectasia; corneal biomechanics explains why we may encounter keratectasia even in patients with more than an acceptable residual stromal thickness (more than $300\ \mu\text{m}$) and a history of LASIK for mild amounts of myopia (less than 4.0 D).^{2,3}

Fourth, the authors mentioned that they performed surgery with a broad-beam laser excimer machine. This type of excimer laser usually causes central islands, especially in cases with high amounts of ablations, one of the complications that made surgeons abandon them.

Fifth, the preoperative and presumed postoperative central keratometry should always be taken into special consideration; it is not wise to flatten the cornea to less than 35.0 D as it can have adverse effects on the quality of vision and create a cornea that is "too oblate."

Sixth, as the authors mentioned, the intended flap thickness may be significantly different from the true flap thickness (as much as $220\ \mu\text{m}$ as they mentioned for a $106\ \mu\text{m}$ intended flap thickness). This may affect the surgeon's calculations to maintain adequate stromal bed after surgery, especially in patients with high myopia.

In conclusion, it is prudent to avoid ablative refractive surgery, especially LASIK, in patients with high myopia (greater than 10.0 D) in this era of phakic intraocular lens implantation for high myopia.

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REPLY: We would like to make the following responses to Mohammadpour's comments:

1. We agree that a 19% follow-up examination after 9 years is low and that 100% would be ideal. However, in the absence of any long-term studies of LASIK at the time the study was carried out, it was concluded that some information on the long-term results in LASIK patients would be a valuable contribution to the literature (J. Marshall, personal communication). Since then, several other studies have confirmed our results.¹⁻⁴ As to the point about patients with poor results not returning to the original center for follow-up when requested and the possibility of their going elsewhere, Ireland, unlike Iran, the United Kingdom, or the U.S., where there are larger geographic areas and population and many more laser centers, is a self-contained island with a limited number of closely knit eye doctors involved in laser surgery who meet regularly to discuss each other's cases; if these cases existed, they would be known about. Ireland also has a significantly more active medical litigious public supported by a hungry legal profession, which would quickly uncover any major complications in our cases should they occur. An indication of this is the annual subscription to our insurance companies for medical indemnity, which currently runs at €70 000 per year.
2. It is obvious that Mohammadpour did not read the final sentence about excimer lasers in the "Patients and Methods" section or the note in Figure 2 that many of the highly myopic patients were deliberately undercorrected (in fact, no patient was fully corrected for -35.0 D) and that the -28.0 D patient who developed ectasia did have too much tissue removed from the cornea. This occurred in the very early cases when we were beginning the study in 1994 and when our experience with LASIK was at its infancy; fortunately, it occurred in a grossly amblyopic eye.
3. In 1994, there was not sufficient knowledge of corneal biomechanics to warrant attention and as mentioned in my ESCRS Ridley Lecture of 2005,⁵ the concept of residual stromal bed thickness was not available to LASIK surgeons until the paper by Probst and Machel,⁶ which was published in 1998.
4. It has been known for a long time that broad-beam lasers initially cause central islands. However, the lasers used in this study, as mentioned in the excimer laser section of "Patients and Methods," were