



ceived as life support than are some of the more dramatic interventions that modern health technology can provide. Yet it is often provided for this purpose without a clear view of the possible negative results. Individuals faced with decisions about long-term tube-feeding may not have a clear concept of quality-of-life issues and may be suspicious that any suggestion to limit care stems from a desire of health care professionals to conserve resources rather than to optimize the quality of care. A time-limited trial of nutritional support could be effective in some situations and would include the identification of goals to be achieved and a commitment to review the decision if these goals are not met. Substitute decision-makers may need help in understanding that it is ethically acceptable to decide to discontinue nutritional support and allow death to occur if this is inevitable.

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The long-term view on refractive surgery

I found the article by Edward Y.W. Yu and W. Bruce Jackson on recent advances in refractive surgery to be interesting, informative and timely.¹

However, as a practitioner of evidence-based medicine, I was somewhat surprised that the outcomes of photorefractive keratectomy (PRK) were quoted at only 1 year of follow-up. Given that this procedure has been performed for almost 2 decades in Canada, surely there are high-quality long-term outcome data for this procedure that the authors can offer.

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[One of the authors responds:]

I thank Shabbir Alibhai for his letter and welcome the opportunity to review the long-term outcomes of PRK in more detail.

After PRK a small amount of myopic regression occurs; it stabilizes by 6 months (Table 1). After the initial 6 months, significant additional regression is uncommon. In our 2-year data for myopia, between 6 and 24 months after PRK the average change in refractive error in patients with myopia of -1 to -12 dioptres (D) was 0.02 D, and only 12.9% of patients demonstrated a shift greater than 0.5 D. Data from 3

Table 1: Change in refractive error following photorefractive keratectomy

Degree of myopia; time after surgery	No. of patients	Mean refractive error, D (and SD)
Mild myopia (-1 to -6 D)		
0 mo	286	-4.10 (1.24)
6 mo	217	-0.14 (0.42)
12 mo	148	-0.21 (0.40)
18 mo	111	-0.17 (0.37)
24 mo	78	-0.13 (0.33)
Moderate to severe myopia (> -6 to -12 D)		
0 mo	122	-7.96 (1.46)
6 mo	93	-0.04 (0.69)
12 mo	72	-0.06 (0.67)
18 mo	38	-0.03 (0.54)
24 mo	34	-0.13 (0.64)

Note: D = dioptres.

trials¹⁻³ confirm the long-term stability of the results of PRK. In fact, in the trial with the longest follow-up period the refractive change for patients with mild to moderate myopia stabilized between 3 and 6 months after PRK and remained stable for up to 6 years.² These trials, along with informal post-marketing surveillance, failed to demonstrate additional complications after the 12-month post-treatment period, unlike the progressive hyperopic shift seen with radial keratotomy.

Although PRK was first performed 12 years ago, additional long-term data are not available. Early 2-year PRK data demonstrating that results stabilized beyond 1 year were widely accepted as evidence of long-term stability and effectively removed much of the impetus to obtain long-term data.

Long-term trials of PRK are extremely challenging to conduct for a number of reasons. It is difficult to retain subjects because patients quickly lose interest in follow-up examinations after deriving the benefit of the procedure. Owing to the selective loss of satisfied patients during follow-up, a high degree of retention must be achieved to avoid overestimation of complication rates. It is also difficult to arouse scientific curiosity and obtain funding for long-term studies because the technology is evolving so rapidly that the PRK techniques used several years ago are no longer performed.

The pace of change in techniques for excimer laser surgery is remarkable. Over the last few years we have seen the discontinuation of the use of nitrogen blowing at the time of surgery, the transition from small treatment zones of 4 mm to much larger treatment zones of 6.5 and 7 mm, the move from single-zone treatments to multizone and multipass treatments, and the advent of broad-beam lasers with scanning capabilities and new flying-spot lasers with eye tracking. Overall, outcomes continue to improve. However, the widespread implementation of innovations may outstrip the clinical demonstration of efficacy. Critical consumers would be well advised to obtain the most recent 6-month and 1-year



outcome data from the laser centre they are considering as well as documentation of the clinical efficacy of innovations implemented since those procedures were performed.

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Doubts about the college

The registrar of the College of Physicians and Surgeons of British Columbia is incorrect in advising physicians to have implicit trust in their provincial colleges.¹

Despite attempts at evolution, our law remains adversarial. During investigations the college's perspective is always that of the public, whereas the perspective of the Canadian Medical Protective Association is always that of the physician. The difference between the quasijudicial setting of a college in-

vestigation and the court setting is the college's relaxed procedure regarding evidence and judgement. This rarely favours the physician.

Considerable pressure is often applied to have accused physicians comply with a college judgement instead of defending themselves vigorously in an openly adversarial manner. Until colleges conduct themselves with the judicial rigour of our courts, I will doubt the value of professional self-government.

Vivian McAlister, MD

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The walnut manoeuvre

Probably most of us have encountered brutal or sneering teachers during our medical training. Usually we think of a rebuttal too late, or do not respond for fear of reprisal. Robert Patterson's "Fear and loathing in residency"¹ reminds me of an encounter that a colleague described to me many years ago in which the student gained the upper hand.

During his education at Harvard Medical School, my colleague was taught clinical skills by a renowned clinician, physician to a president of the

United States. This man was well known for his delight in picking out one student in each group for gruelling questioning until the student was reduced to jelly. He would ask sneeringly, "And just what do *you* know about *that*?"

In one clinical skills group was a student whom I shall call Collins. From the first session Collins realized he was to be favoured with this special attention. He prepared himself accordingly. When asked to examine a patient, he felt the inguinal nodes and casually remarked, "Yes, I feel a lump ... definitely a lump."

"Well, describe it."

"It is firm ... not mobile and ... about the size of an English walnut."

"So ... and just what do *you* know about English walnuts?"

Collins stood up, looked his teacher in the eye, and began. He described the tree, its height and breadth, its geographic location and climatic limits, its production of walnuts, their size, consistency, industrial uses and value to the economy, and so forth, continuing without pause until the end of the session. Collins was never troubled again.

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1. Patterson R. Fear and loathing in residency. *CMAJ* 1999;161(4):419.

Submitting letters

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