

# International Edition

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## Patient demand for excimer surpasses RK

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MELBOURNE—With the advent of excimer laser photorefractive keratotomy (PRK) in this city of three million people, radial keratotomy has all but disappeared.

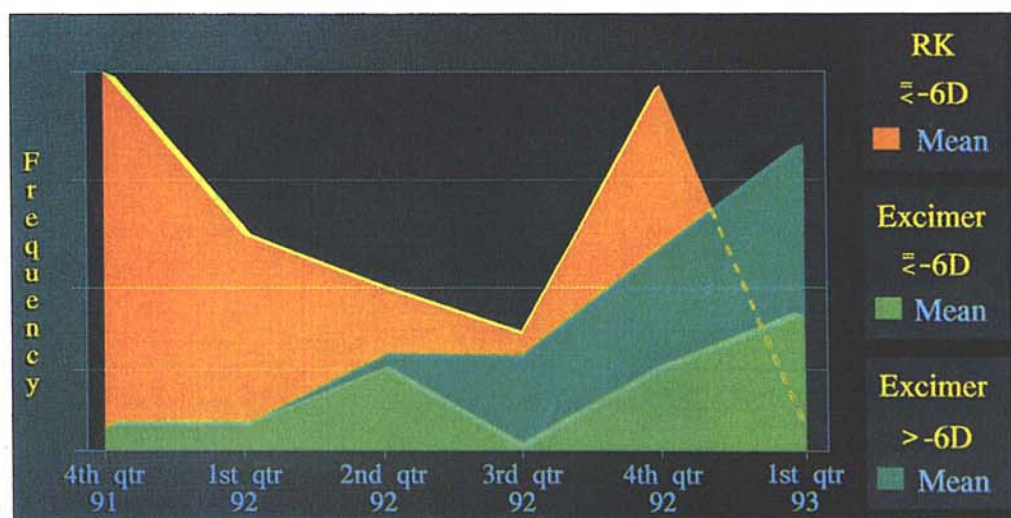
Two years ago, ophthalmologists from 20 different practices here joined ranks to purchase a VisX 20/20 excimer laser—the only excimer laser in Melbourne and the only VisX laser on the continent. In their excitement to try the modality, most of the ophthalmic surgeons who were performing it abandoned RK in favor of PRK.

Noel Alpines, MD, who has performed more than 1000 RKs since 1984, believes he is the only ophthalmologist in Melbourne still using RK. About 15 months after adding laser surgery to his practice, the demand for laser surgery surpassed

*An Australian surgeon reports that since the introduction of excimer laser PRK in his city, patients there have lost interest in radial keratotomy.*

the demand for RK.

In part, Alpines said, he believes PRK is becoming more popular because it treats a broader range of myopia. He performs laser surgery on patients with up to 18 D of myopia and RK in patients with no more than 5 D of myopia. Another advantage of excimer surgery is that it can treat both astigmatism and myopia, whereas RK addresses myopia and only lesser amounts of astigmatism. In fact, 80% of Alpines' laser patients also have astigmatism.



Frequency of excimer laser PRK—especially for higher degrees of myopia—has climbed steadily since the introduction of the technology. After a final peak of interest, RK surgery is in a rapid decline.

Alpines said he believes there is likely to continue to be a place for astigmatic keratotomy when treating astigmatism associated with cataract surgery.

“For all of 1992 and the early part of 1993, I was really doing a lot more radial keratotomy surgery than excimer surgery,” Alpines said in an interview. (See Demand, page 20)

### Demand

interview with OCULAR SURGERY NEWS INTERNATIONAL EDITION.

However, patient demand changed all that. “Patients are now coming with a very strong request for excimer,” Alpines said. “I think it’s important to let the patients decide on the procedure themselves.”

Unless there are contraindications, Alpines honors a patient’s choice of modality. He currently performs excimer laser surgery about seven times more frequently than RK surgery. Surgeons cannot advertise in Australia, but since the excimer was introduced, word of mouth

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has intensified the demand for laser surgery.

“When you have an open choice between the two... I don’t have any doubt that excimer laser surgery is totally going to dominate the market, and radial keratotomy, within a year of excimer’s unrestricted availability, will become a much less used modality of treatment,” Alpines said.

Patients who have had excimer surgery “are very satisfied with the results, and they’re talking about it,” he continued. When new patients come to the office, they’ve generally already decided which procedure they want based on the experience of the person who referred them.

#### Pain accepted

The threat of experiencing more pain with the laser does not seem to deter patients, according to Alpines. His laser patients have experienced only a moderate amount of pain, a fact he attributes to the use of non-steroidal anti-inflammatory drugs. Alpines gives patients one dose of an NSAID immediately postop and prescribes an analgesic and hypnotic for sleep. He then prescribes antibiotics for about a week and topical anti-inflammatories for about four months beginning when the epithelium has healed—usually the third postop day.

Alpines believes all NSAIDs are comparably effective in reducing pain. He has tried Voltaren (diclofe-

nac sodium, Ciba Vision Ophthalmics) and found it “a very good drug,” but it is generally not available in Australia. He currently uses Indoptol (indomethacin, Merck).

Cost is another factor that does not seem to play a part in a patient’s choice of modality, according to Alpines, especially in light of the fact that the more popular excimer surgery costs about 50% more than RK. Alpines charges the equivalent of approximately US\$2000 for excimer surgery and US\$1300 for RK.

A third advantage of RK that does not seem to affect a patient’s choice of modality, Alpines said, is healing time. With RK, the second eye can be operated on two to four weeks after the first. With the excimer, Alpines waits three months. RK has the disadvantages, however, of leading to glare and starburst.

Although Alpines said that “RK is an excellent operation” and that he had “a healthy degree of skepticism” about laser surgery at first, he believes the future lies with the excimer.

“I think there’s more potential for future development with excimer laser surgery,” Alpines said. On the other hand, he said, RK is “an established operation performed now for 20 years, which has been developed to about as sophisticated a level as it can be.”