

## REFRACTIVE SURGERY

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# What are practical applications to civilian refractive surgery from extensive military refractive results, and how could civilian surgeons incorporate those applications into practice?

### POINT

#### Potential for civilian emergency personnel

These military databases that were carefully put together had great follow-up and large numbers, no bias to manufacturers and no bias to procedures, and they were strictly done on evaluating the safety and efficacy of the procedures.

Some of the results show that the surface ablation procedure is very safe and very effective with well-selected patients. I think that we have had a real gap between the U.S. Food and Drug Administration approvals — the FDA approval for PRK came in 1995 — and the manufacturers because once they get approval of their lasers, they have not had a lot of incentive to go back and do another study. These high-quality post-approval studies are really important because the large databases are some of the most important ones we have when we are talking about safety and efficacy of modern surgery.

I have been very interested in taking this military research to our nonmilitary safety workers. I feel that this is something that we ought to do in every local community: work on our policemen and firemen to make sure that they have the advantages when they are trying to save lives in the middle of a fire or trying to decide if somebody down the alley has a gun in their hand. We need to make sure that we carry this information that is making us safer on the battlefield into every community in the country.

I have been working with some of the city councils and some of the policemen and firemen agencies directly. As a service, we should figure out how to make our communities safe by having the best vision possible for the people who are putting their lives on the line for us locally every day.



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### COUNTER

#### Assessments could assist in general population

Over time, studies from the military have looked at a number of different procedures and approaches using a variety of laser platforms and techniques, so protocols and results of military refractive surgery give us substantial and dependable literature on which to assess and compare these different approaches. In particular, PRK has been very carefully assessed in their studies. Moreover, because actual visual function is so important to the day-to-day operations of our military personnel, studies from the armed services have also explored visual function in a number of ways, illuminating our understanding of the actual real world visual effects of refractive surgery.

I think that incorporating some of these visual function assessments into our civilian practices would be helpful both in patient selection and in assessing patients who may have subjective vision complaints postoperatively. Similarly, given strict safety considerations of particular importance to the military, the studies they have done and experience they have gained can help us to properly counsel patients with regard to postoperative activities and risks associated with more vigorous activities.



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