



tial, since many of the lesions treated by this method are decidedly uncommon. Eventually, this collaboration may make it possible for us to standardize techniques or even undertake prospective clinical trials.

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Over the last decade the use of stereotactic radiosurgery has increased worldwide as an important, minimally invasive surgical treatment. However, radiosurgery has developed much more slowly in Canada than in other countries, despite the prominence of Canadian experts in neurosurgery and radiation oncology.

As Dr. Schwartz states, the application of any technology is dependent on operator skill, and one component of that skill relates to experience. The issue is how patients and physicians can assess level of technical expertise, particularly for novel treatments such as radiosurgery.

To Schwartz's description of the basic aspects of each technology we would add the comment that investigators comparing the physics of the Gamma Knife and the linear accelerator found that dose plans were better with the Gamma Knife.^{1,2}

With regard to fractionation and radiosurgery, the literature argues for single-fraction radiosurgery for arteriovenous malformations and benign tumours.^{3,4} Hall and Brenner³ recommended fractionation for malignant tumours, acknowledging that good results can be obtained with radiosur-

gical treatment for malignant lesions of the brain.

Canadian physicians must recommend treatments on the basis of safety, efficacy and cost-effectiveness. Until physicians and their patients have some understanding of the safety and efficacy of radiosurgery in Canada, we caution against the blanket denials of provincial health plans to Canadian patients who, on the recommendation of their physicians, choose to receive such care outside Canada.

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Disclosure: Dr. Kondziolka is a consultant for Elekta Instruments, Inc.

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[The author responds:]

What Drs. Kondziolka and Cusimano refer to as the "slow" development of radiosurgery in Canada really represents a cautious

approach and a desire to rigorously define the indications for radiosurgery, so that no patient is subjected to unnecessary treatment.

For physics comparisons, I would call attention to a report of poor correspondence between calculated dose and measured radiation effect for the Gamma Knife¹ (Fig. 3 in that article) and the good correspondence reported by our centre² (Fig. 2 in that article).

I certainly agree that "Canadian physicians must recommend treatments on the basis of safety, efficacy and cost-effectiveness." With these criteria, they may very well choose treatment in Canada.

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