



duce the frequency of amputation of insensate limbs.

In a study of patients who underwent unilateral amputation,<sup>1</sup> we found not only that people with diabetes mellitus were at significant risk for sensory neuropathy but also that a significant proportion of amputees who presented with only peripheral vascular disease also presented with peripheral nerve impairment in the lower extremity, secondary to their vascular disease.

In considering methods to improve foot care and education for people with diabetes mellitus and known neuropathy, we should extend such efforts to anyone who exhibits significant compromise of the peripheral vasculature.

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#### Reference

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## Surgery in stereo

**D**r. Michael Schwartz's article "Stereotactic radiosurgery: comparing different technologies" (*CMAJ* 1998;158[5]:625-8) should help to clarify for the medical community at large the nature and relative merits of the different technologies available for this type of treatment.

In addition to the Canadian centres to which Schwartz refers, there has been since June 1997 a stereotactic radiosurgery program at the University of British Columbia, a collaborative effort of the BC Cancer Agency and the Division of Neurosurgery of the Vancouver Hospital and Health Sciences Centre.

Further to Schwartz's comments

on fractionation, it should be specified that, at present, fractionated radiotherapy cannot be administered with the Gamma Knife (Elekta Instruments Inc., Atlanta). Fractionation holds particular promise in the treatment of larger neoplastic lesions, especially those adjacent to important normal structures and those in children's brains, tissues that may be particularly susceptible to the adverse effects of irradiation.

Although stereotactic radiotherapy is used most often to treat intracranial disease, its use in the treatment of lesions just below the skull base has been reported.<sup>1</sup> Current technologies do not allow this treatment for le-

sions located more inferiorly in the head and neck region. Stereotactic localization systems for the head and neck are under development for linear accelerators.

Stereotactic radiotherapy necessitates cooperative efforts involving not just neurosurgery and radiation oncologists, but also neuroradiologists, medical physicists, radiation therapists and professionals in other disciplines. The quality of stereotactic radiotherapy at a given centre has more to do with the expertise of the team as a whole than with the particular technology employed.

I believe that here in Canada collaboration between centres is essen-

## NUMÉRO DES FÊTES 1998

### APPEL DE COMMUNICATIONS FARFELUES

Date limite : le 1<sup>er</sup> octobre 1998

En décembre dernier, le *JAMC* a publié son premier numéro des Fêtes. Nous espérons en faire une tradition annuelle, mais tout dépend de vous. L'année dernière, nous avons présenté une rétrospective de l'année où des auteurs de toutes les régions du Canada ont décrit les progrès réalisés dans leur spécialité. Cette année — et nous admettons sans gêne avoir emprunté l'idée de nos amis du *BMJ* — nous visons des résultats plus légers. Voici ce qu'ils recherchent : «Le cocktail habituel de textes d'un sérieux mortel, prenants, hypothétiques, légers ou tout bonnement loufoques.»

Nous savons que les médecins du Canada peuvent être aussi loufoques que n'importe qui et c'est pourquoi nous lançons le défi. Faites nous parvenir vos études bizarres, vos recherches sans preuves, vos preuves anecdotiques outrées. Dites-nous pourquoi vous auriez dû être vétérinaire ou banquier d'affaires. Documentez ce qui ne l'est pas. Exemple :

un des comptes rendus publiés dans le *BMJ* en 1997 s'intitulait «Les personnes de poids trop élevé enlèvent-elles leurs chaussures avant de se faire peser par un médecin? Étude consécutive sur des patients en pratique générale.» Vous voyez l'idée. Nous cherchons des articles prenants qui ont trait à la pratique.

Nous demandons des textes de moins de 1200 mots et nous encourageons les illustrations les plus farfelues. Les efforts collectifs aussi — nous aimerions recevoir des textes d'une clinique ou même d'un département d'hôpital au complet. Pour discuter d'un document que vous voulez présenter, veuillez appeler le D<sup>r</sup> John Hoey, au 800 663-7336 x2118, [hoeyj@cma.ca](mailto:hoeyj@cma.ca), ou Patrick Sullivan, x2126, [sullip@cma.ca](mailto:sullip@cma.ca).

Nous devons recevoir votre texte ou votre proposition au plus tard le 1<sup>er</sup> octobre 1998. Veuillez les faire parvenir au D<sup>r</sup> John Hoey, rédacteur en chef, *JAMC*, 1867, prom. Alta Vista, Ottawa ON K1G 3Y6.



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.<sup>1,2</sup>

With regard to fractionation and radiosurgery, the literature argues for single-fraction radiosurgery for arteriovenous malformations and benign tumours.<sup>3,4</sup> Hall and Brenner<sup>3</sup> 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 Knife<sup>1</sup> (Fig. 3 in that article) and the good correspondence reported by our centre<sup>2</sup> (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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