

Cyberknife radiation relieves stabbing pain of facial nerve condition

January 27 2012

A technique that delivers highly focused beams of radiation, known as Cyberknife, can relieve the stabbing pain of the facial nerve condition trigeminal neuralgia, indicates a small study published online in the *Journal of NeuroInterventional Surgery*.

Trigeminal neuralgia is thought to affect around five in every 100,000 people. It takes its name from the trigeminal nerve, the source of the pain, which is experienced as a sharp, stabbing/[burning sensation](#), affecting the jaw or cheek.

While brief, these episodes are recurrent, and drug treatments often fail to provide long lasting relief and/or have a range of side effects. Surgery is often successful, but not all patients are candidates for anaesthesia and some simply don't want such an [invasive procedure](#).

The authors treated 17 patients with trigeminal neuralgia with Cyberknife radiosurgery between 2007 and 2009.

The patients, who were aged between 36 and 90, had had their symptoms for between one and 11 years and had not responded to the available treatment options.

The researchers zapped a 6mm length of trigeminal nerve, just 2 to 3mm from the root, using a maximum [radiation dose](#) of 73.06 Gy.

The patients were then monitored regularly after the procedure, for an

average of just under 12 months.

Complete data were available for 16 patients, 14 of whom obtained either partial or complete relief from their symptoms.

The average time before symptom relief occurred was just under two months, but varied from three weeks to six months. Four patients relapsed after the procedure, between three and 18 months later.

No patient experienced major complications as a result of the procedure, and only two patients reported any sensory side effects, prompting the authors to conclude that [radiosurgery](#) offers a viable alternative to more invasive approaches and warrants further investigation.

Provided by British Medical Journal

Citation: Cyberknife radiation relieves stabbing pain of facial nerve condition (2012, January 27) retrieved 25 April 2024 from

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