

1: Neurosurg Focus. 2004 Aug 15;17(2):E11.

## **Efficacy and safety of stereotactic radiosurgery for glomus jugulare tumors.**

**Lim M, Gibbs IC, Adler JR Jr, Chang SD.**

Department of Neurosurgery, Stanford University Medical Center, Stanford, California, USA.

**OBJECT:** Since the mid-1990s the use of radiosurgery for glomus jugulare tumors has grown in popularity. Despite its increased use, follow-up periods for radiosurgery are short and the numbers of patients reported are small. To add to the available information, the authors report their experience with the application of linear accelerator (LINAC) or CyberKnife modalities in 13 patients with 16 tumors.

**METHODS:** All patients were treated with frame-based LINAC or CyberKnife radiosurgery, with doses ranging from 1400 to 2700 cGy. Patients were retrospectively assessed for posttreatment side effects, which included hearing loss, tongue weakness, and vocal hoarseness. The patients' most recent magnetic resonance (MR) images were also assessed for changes in tumor size. The median follow-up duration was 41 months and the mean follow-up period was 60 months. All tumors remained stable or decreased in size on follow-up MR images. All patients had stable neurological symptoms, and one experienced transient ipsilateral tongue weakness and hearing loss, both of which subsequently resolved. One patient experienced transient ipsilateral vocal cord paresis; however, this individual had received previous external-beam radiation therapy.

**CONCLUSIONS:** The authors' findings continue to support radiosurgery as an effective and safe method of treatment for glomus jugulare tumors that results in low rates of morbidity.

PMID: 15329026 [PubMed - indexed for MEDLINE]