Face nerve schwannomas are relatively rare benign neoplasms of Schwann cell origin. They are the third most common cranial nerve schwannoma, along with the trigeminal nerve and vagus nerve schwannoma. Patients typically present with gradual progression and onset of unilateral hearing loss, facial paralysis, or symptoms from mass effect. Schwannomas may occur in a hereditary setting, most often determined by the clinical-radiological picture (esp. HB score) and growth rate. The role of adjuvant treatment is not well established given the variety of treatment options available. The aim of management is to ensure that the patient has the best functional outcome whilst being alive. The goals of treatment are: observation, microsurgical excision and repair. The goals of facial nerve schwannoma are discussed in detail below. Observation is commonly employed in patients with good facial nerve function to avoid the risks of surgery. Microsurgical excision and repair involves the removal of the schwannoma and repair of the facial nerve. This is the most common method of treatment. Observation is recommended for patients with stable nerve function (HB II) who are poor surgical candidates. Whilst FCD does not reduce tumour growth but rather reduces the rate of tumour progression, FCD is an alternative option especially in patients with large expanding tumours. It involves the radiological assessment of the facial nerve and vestibular dysfunction. FCD negates the need for a surgical procedure. The use of Cyberknife in FNS management is a relatively new option. Cyberknife has been used in the management of high-grade meningiomas, and has not been well documented in the literature. It involves the radiological assessment of the facial nerve and vestibular dysfunction. FCD does not reduce tumour growth but rather reduces the rate of tumour progression.

After obtaining Institutional Review Board approval, a retrospective study was done identifying all patients with facial nerve schwannomas seen at our institution between 2002 to 2011. A total of 11 patients were identified. Each patient’s clinical presentation and management were examined. The mean age of patients was 54.5 years (age range: 23–83 years). The median duration of symptoms was 2 years (range: 1 month–20 years). The majority of patients were male, 10 males and 1 female. All patients were clinically assessed using pure tone audiometry at presentation (pre-treatment) and also post-treatment. Pure tone average and speech discrimination scores (SDS) were calculated out using standard technique. Pure tone average was calculated based on the recommendations of the committee on hearing and equalization of the american-academy of otolaryngology. Hearing was categorized according to the House-Brackmann (HB) scale. Patients were surgically excised if they had symptomatology and symptoms had progressed for more than 1 year. The criteria defined as having a pure tone average better than 50 dB and SDS greater than 70% for the HB III or HB IV were treated surgically. Patients were considered as having high-grade mass lesion if computed tomography (CT)/and or magnetic resonance imaging (MRI) showed compressive symptoms on the clinical-radiological findings. The four main tiers of management were determined and correlated with other surgical and radiofrequency compression techniques. Microsurgical decompression and repair were performed on all patients with a HB IVA or HB IV. Cyberknife radiation was performed at our institution for 2 patients and Gamma Knife was performed at an outside facility for another. All cases were operated on by the senior authors (S.I.A. and F.F.T.) and all cases were radiologically assessed. Treatment was based predominantly on the clinico-radiological picture.

FCD is an alternative option especially in patients with large expanding tumours. It involves the radiological assessment of the facial nerve and vestibular dysfunction. FCD does not reduce tumour growth but rather reduces the rate of tumour progression. It involves the radiological assessment of the facial nerve and vestibular dysfunction. FCD negates the need for a surgical procedure. The use of Cyberknife in FNS management is a relatively new option. Cyberknife has been used in the management of high-grade meningiomas, and has not been well documented in the literature. It involves the radiological assessment of the facial nerve and vestibular dysfunction. FCD does not reduce tumour growth but rather reduces the rate of tumour progression.

- **References**


- **CONTACT**

  2. Afterwards, a post-conference oral session was held with each participating author (S.I.A. and F.F.T.) and the Cyberknife radiation was performed at our institution for 2 patients and Gamma Knife was performed at an outside facility for another.