

toxicity during treatment compared with those receiving photon therapy. Larger studies are needed to confirm these results.

#### PO-1052 Cyberknife stereotactic radiotherapy for vestibular schwannomas :a single institution experience

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##### Purpose or Objective

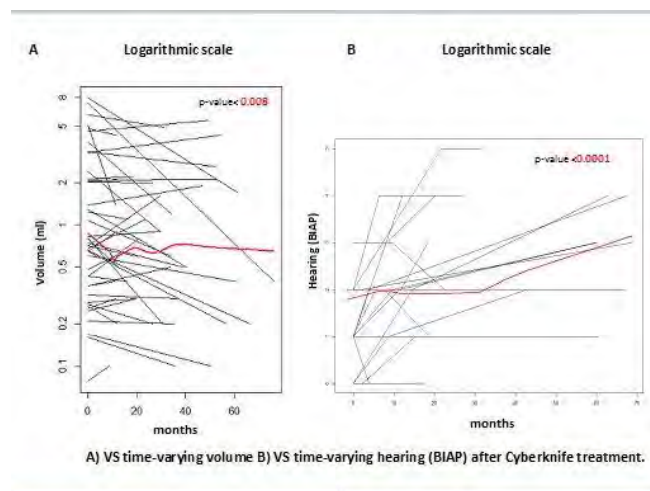
Report our experience of fractionated stereotactic radiotherapy Cyberknife (CK) for vestibular schwannoma (VS) in order to assess the posttreatment clinical symptoms, tumor control and post treatment auditory function.

##### Materials and Methods

Retrospective analysis of 45 VS patients treated by CK from 2010 to 2016, classified in location and size according to Portman-Bebear and Koos (PBK) and according to 2 audiometric scales: the International Bureau of Audiophonology (BIAP) and the Gardner Robertson scale (GR). Data including CK treatment parameters, pre and post CK clinical signs, pre and post CK tumor volumes and auditory parameters were collected and examined.

##### Results

80% of the pre CK clinical symptoms improve in post-CK and 20% increase slightly. 77.3% of patients, with a mean post CK magnetic resonance imaging (MRI) follow-up of 31.5 months, had an excellent tumor control. Excluding 2 patients who died in post CK and 8 pre CK cochitis patients, 21 (60%) of the remaining 35 BIAP patients, with a mean audiometric post CK follow-up of 33.65 months, maintained a good pre CK comparable audiometric stabilization. The other fourteen BIAP patients (40%) experienced variable hearing impairment (33.3% had slight increased hearing thresholds from 10 to 24dB in pure tone audiometry) which is not related to a pre CK high tumor volume (tV).



##### Conclusion

CK based fractionated stereotactic radiotherapy provided a very good tumor control, an improvement of clinical symptoms and a good hearing preservation rate in VS patients.

#### PO-1053 Validation of Modified Combs criteria in Indian cohort for re-irradiation in recurrent gliomas

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##### Purpose or Objective

In gliomas, local relapse rates are high and re-irradiation (ReRT) is a viable option, but is associated with increased radiation toxicity concerns. This retrospective study aims to evaluate the clinical outcomes in recurrent glioma patients treated by different fractionation schedules and validate the modified Combs prognostic score in our cohort.

##### Materials and Methods

In our study, 53 patients with recurrent gliomas after previous adjuvant radiation therapy (RT), who received ReRT between Jan 2009 and Dec 2020 were included and data collected from electronic medical records. Patients were categorized as per the Modified Combs prognostic factors [Age, Primary histology, KPS, Time between primary RT and ReRT, Re-resection status and tumour volume] into 4 Groups a, b, c, d and their outcomes determined for comparison.

##### Results

Among the 53 patients, median age was 41 years (6 -70), 28 (53%) were males, 32 (60%) had KPS  $\geq$  80. Primary histology was low grade in 19 (36%), Grade 3 in 14 (26%) and Grade 4 in 20 (38%) patients. The median initial