Conclusion: RT20VG C is the best treatment followed by IVGC and CysprnPOGC per this NMA. Also, RT20RBGC and SSang were better than NoTx.

Material and Methods: One hundred and three patients with recurrent Head and Neck cancer (HNC) after radiotherapy or surgery has many problems about salvage treatment options such as surgery, chemotherapy and radiation therapy. Stereotactic radiotherapy is one of the treatment options for inoperable patients. However, in many cases, salvage radiation (SRT) is considered as a re-irradiation, and the treatment results of salvage radiation with a definitive dose for recent HNC are still insufficient. This analysis was done to reveal the treatment results and prognostic factors in SRT for both of locoregional and distant recurrences, with definitive treatment dose.

Results: Median follow up period of survivors was 17 months (range 0-103), and the median survival time of all patients was 23 months. At 3 years, actuarial overall survival rate (OS) was 37%, 33% and 23%, and median survival time was 30, 26 and 20 months for local, regional and distant recurrence, respectively (p=0.638). OS was significantly better in the patients with oligo-recurrence (p=0.001) or to whom SRT were done for a lesion previously untreated by surgery (p=0.001). Cox regression analysis indicated that factors of oligo-recurrence and histology except for squamous carcinoma had significant influence on OS. The favorable group having both of the two factors (n=23) showed excellent 5 year survival as 73% compared with 15% of unfavorable group.

Conclusion: This study showed that SRT with definitive dose achieved equivalent survival regardless of recurrent site and revealed two prognostic factors of oligo-recurrence and non-squamous carcinoma in the SRT for recurrent HNC.

Poster: Clinical track: CNS

PO-0640 Prognostic factors in definitive salvage RT for recurrent Head and Neck cancer

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Purpose or Objective: Recurrent head and neck cancer (HNC) after radiotherapy or surgery has many problems about salvage treatment options such as surgery, chemotherapy and radiation therapy. Stereotactic radiotherapy is one of the treatment options for inoperable patients. However, in many cases, salvage radiation (SRT) is considered as a re-irradiation, and the treatment results of salvage radiation with a definitive dose for recent HNC are still insufficient. This analysis was done to reveal the treatment results and prognostic factors in SRT for both of locoregional and distant recurrences, with definitive treatment dose.

Material and Methods: One hundred and three patients with 43 local, 23 regional and 36 distant recurrences were treated with CyberKnife or Novalis treatment system. There were 59 patients with squamous cell carcinoma, 8 with adenoid cystic carcinoma, 7 with papillary adenocarcinoma and 26 patients with other histological type.

Results: Median follow up period of survivors was 17 months (range 0-103), and the median survival time of all patients was 23 months. At 3 years, actuarial overall survival rate (OS) was 37%, 33% and 23%, and median survival time was 30, 26 and 20 months for local, regional and distant recurrence, respectively (p=0.638). OS was significantly better in the patients with oligo-recurrence (p=0.001) or to whom SRT were done for a lesion previously untreated by surgery (p=0.001). Cox regression analysis indicated that factors of oligo-recurrence and histology except for squamous carcinoma had significant influence on OS. The favorable group having both of the two factors (n=23) showed excellent 5 year survival as 73% compared with 15% of unfavorable group.

Conclusion: This study showed that SRT with definitive dose achieved equivalent survival regardless of recurrent site and revealed two prognostic factors of oligo-recurrence and non-squamous carcinoma in the SRT for recurrent HNC.

Poster: Clinical track: CNS

PO-0641 Radiosurgery for intracranial meningioma. A systematic review and meta-analysis

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Purpose or Objective: Single session radiosurgery (SRS) and staged radiosurgery (sSRS) have been performed in primary and adjuvant settings for intracranial meningioma. Although, different aspects of SRS and sSRS are still controversial above all regarding timing, prescriptive doses and fractionation of delivery. So far there are no definitive data about treatment-related symptom control and toxicity and categorization. The aim of this systematic review is to summarize the data on the long-term efficacy and safety of SRS and sSRS for meningioma patients.

Material and Methods: Medline and Embase databases were searched for relevant studies published until April 2015. Experimental and observational studies focused on SRS and sSRS for intracranial WHO grade I and II meningioma were included. Studies enrolling a number of patients inferior to five for each arm (for comparative studies) or overall (for non-comparative studies) were excluded. Studies including patients with malignant meningioma (WHO grade III), radio-induced meningioma or patients who had previously undergone brain radiation therapy were excluded from our review. Studies including both benign and malignant meningiomas were considered eligible, provided that results were reported separately, according to histological subtype. The primary outcomes were disease control and progression-free survival. The secondary outcomes were symptom control and radiation-induced toxicity.

Results: Thirty-four studies fulfilled eligibility criteria. Only two studies were about sSRS. The estimate of disease control rate ranged from 87.0% to 100.0% at 5 years and from 67.0% to 100.0% at 10 years. The PFS rate ranged from 78.0% to 97.2% at 5 and 10 years, respectively. No meta-analysis could be performed. We meta-analyzed symptom control and toxicity data. The overall frequency of symptom control was 88.4% (95% CI: 88.4-95.6%). The overall relative frequency of patients with toxicity of 8.1% (95% CI: 0.6% - 9.6%).