

Poster discussion, 122PD – 124PD

Ryo Nishikawa

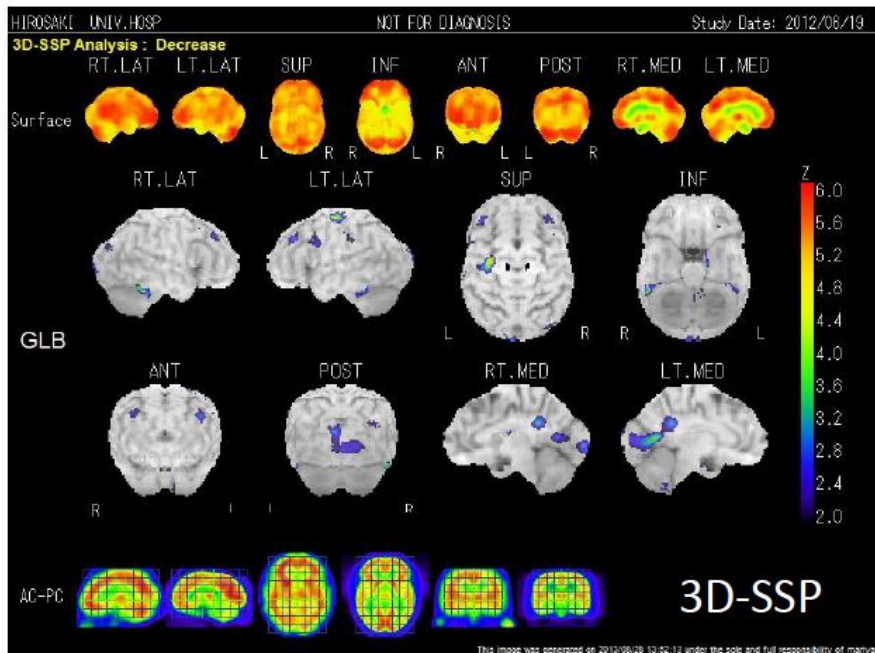
Saitama Medical University International Medical
Center, Saitama, Japan

Ryo Nishikawa: Disclosures

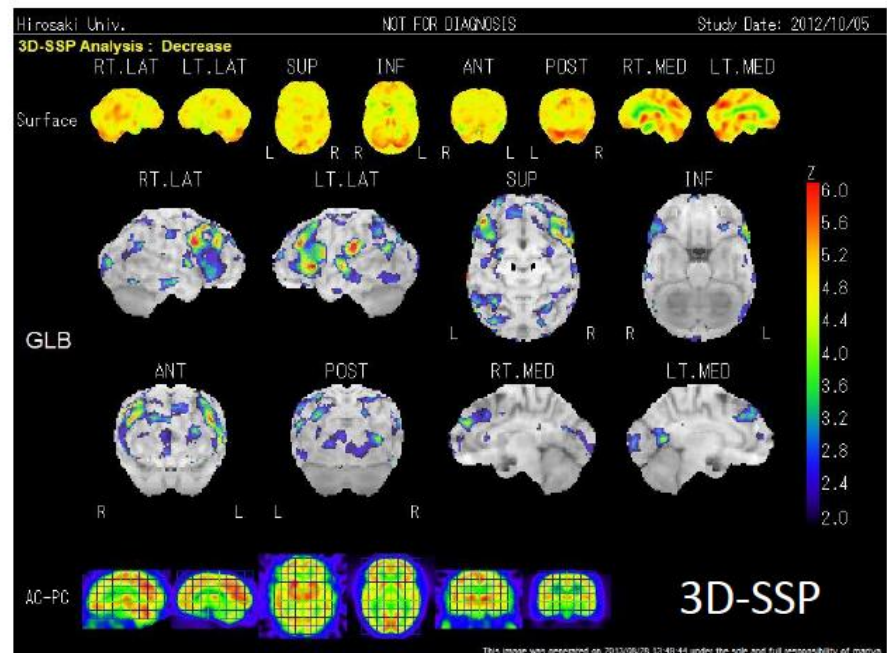
- AbbVie
- Roche
- Chugai
- MSD
- Novocure
- Eisai

122PD: Stereotactic statistical analysis of brain perfusion SPECT using 3-D stereotactic surface projections to estimate brain function of the patients harboring brain metastases before and after radiotherapy. Mariya Y, et al. Hirosaki, Japan

- Regional CBF of brain was analysed using 3D-SSP technique.
- 12 cases were included: WBRT 9, partial 1, SRT 2.
- Before and 2-4 months after RT, 3D-SSP and MMSE were performed.



3-D SSP before treatment



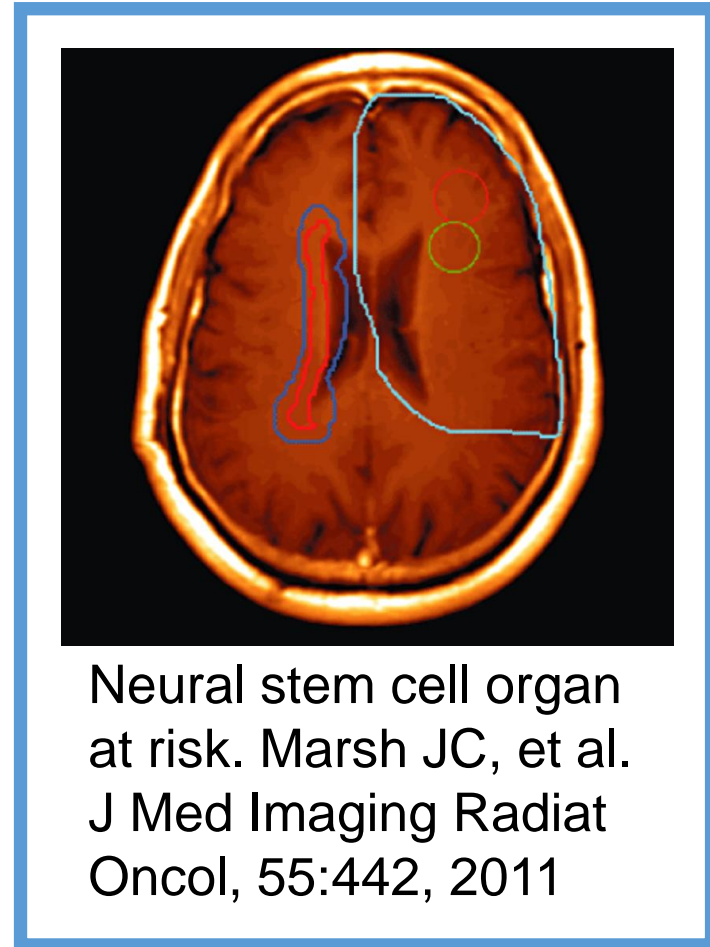
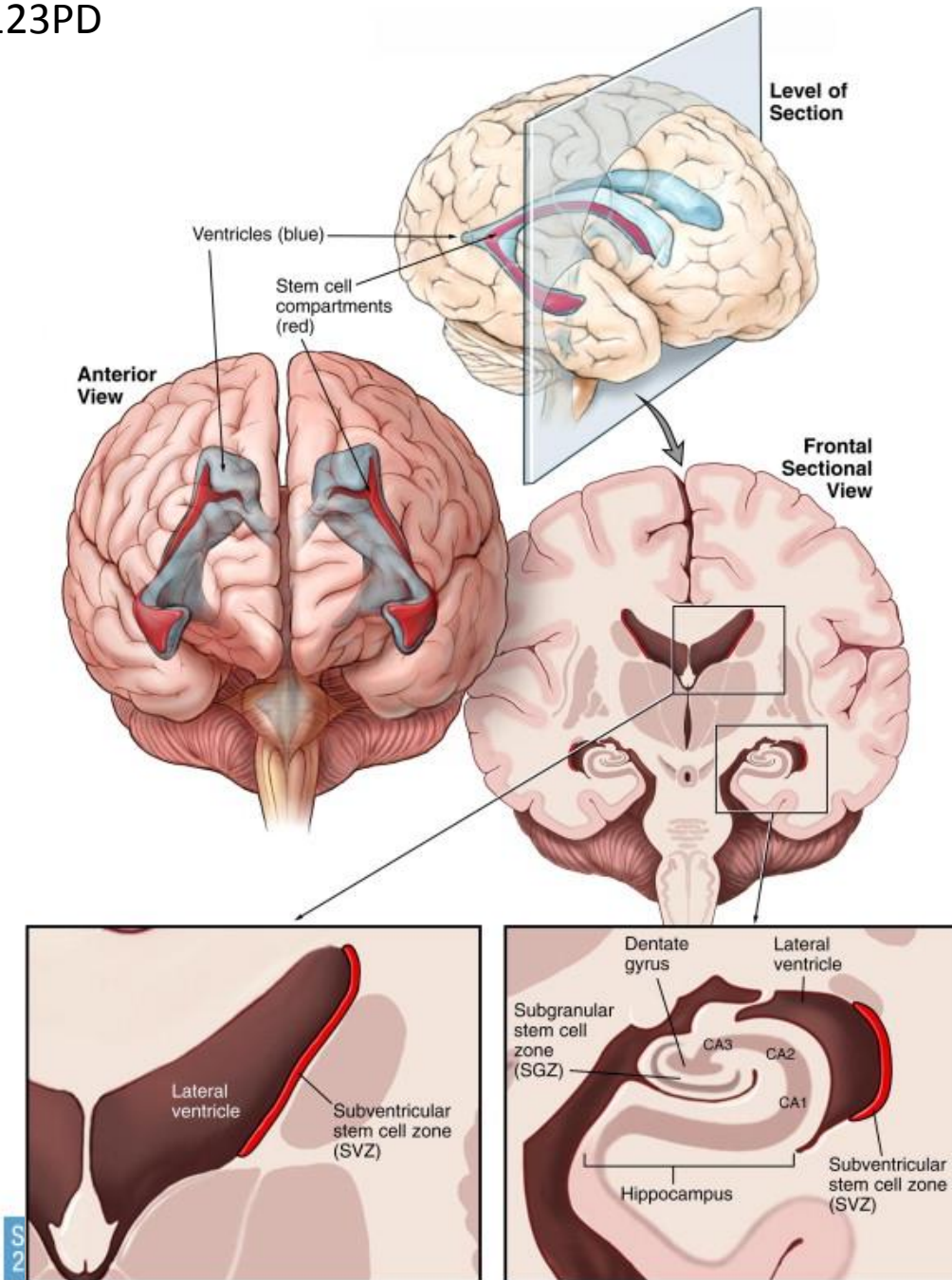
4 months after treatment

- A pt who received WBRT showed diffuse decrease of rCBF as above, whose MMSE also were worsened from 30 to 23/30.
- WBRT may have a risk of diffuse decrease of CBF and NCF impairment.

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- We know a lot about WBRT, but relatively little information about partial brain radiotherapy.
- There was only a single case of partial brain radiotherapy included in this study.
- We would be interested in the distribution of rCBF after PBRT and their NCF results as well.

Subventricular stem cell zone. Igor J, et al. Int J of Radiat Oncol Biol Physics, 68:324, 2007



Neural stem cell organ at risk. Marsh JC, et al. J Med Imaging Radiat Oncol, 55:442, 2011

123PD: A study of feasibility of sparing neural stem cells (NSC) in brain tumors using intensity modulated radiotherapy (IMRT). Roy, M. Mumbai, India.

- Neural stem cells were spared by IMRT as areas encompassing 0.5cm around the lateral ventricles of the brain.
- 22 brain tumor patients were included: GBM 14, astrocytoma 3, glioma 3, ependymoma 1, pituitary adenoma 1.

123PD: A study of feasibility of sparing neural stem cells (NSC) in brain tumors using intensity modulated radiotherapy (IMRT). Roy, M. Mumbai, India.

- They analysed survival as a whole, that does not mean anything as the pts population is a mixture of various histologies.
- How they evaluated NCF is not shown.



124PD: Strategic planning and teamwork key to immediate minimal side effects and early good outcome of stereotactic radiosurgery and radiotherapy in patients with vestibular schwannomas; the National Cancer Institute Putrajaya Experience. M.A. Mohamed Ali, et al. Putrajaya, Malaysia.

- SRS/SRT for 14 pts of vestibular schwannomas.
- 8 SRS, mGTV=1.15 cm³. 6 SRT, mGTV=4.04 cm³.
- No significant side effects other than grade 2 worsening of headache 6 months after irradiation.

IGRT: 6D robotic couch correction with
dual isocenter kV x-ray
Follow-up with Neurosurgery
& Oncology team

Image fusion
Contouring OAR/target
Plan Evaluation
Quality Assurance
– Machine & Treatment Planning

National referral center
Monthly tumour board meeting
Invited team members
Clinical review, inpatient care
and assessment of the SOP
Informal case discussion
and period of reflection

Baseline pure tone audiometry
MRI head
Immobilisation with frameless
SRS mask
CT simulation
Ensure patient's comfort
and safety