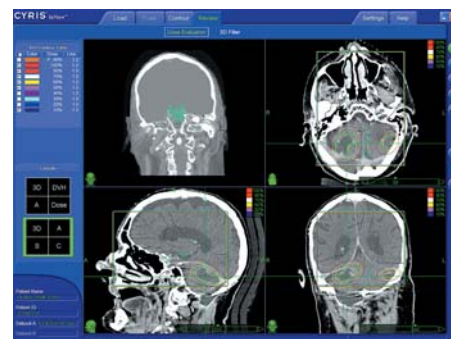
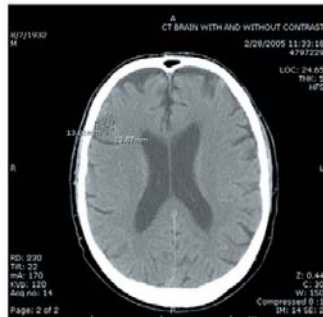


CyberKnife® Case Study



Pre-procedure CT Scans showing two of three lesions

Treatment plan

PATIENT HISTORY:

A 73-year-old male presented with progressively worsening dizziness and gait instability, thought to be because of a right leg weakness. He was found to have multiple lesions, thought to be metastatic, initially unknown in origin. A large right cerebellar mass was surgically resected because of size and location. Post-operatively, he was treated with whole brain radiation, but this had to be stopped at 9 of 14 treatments because of toxicity.

After the whole brain radiation was stopped, he was felt to be a candidate for CyberKnife therapy. He underwent an initial CT scan with poor enhancement. A second CT scan was done with a double-dose of contrast which showed the prior tumor resection, with another right cerebellar lesion, a left frontal lesion and a right fronto-parietal lesion.

CYBERKNIFE ADVANTAGE:

This patient had multiple metastases to the brain. One was resectable, the others were not. He was not a candidate for whole brain radiation since he became toxic with just over half of his total doses still to go. In addition, with his age he would have made a poor surgical candidate.

TREATMENT:

This patient was treated with one treatment. Two of the tumors received 19Gy, and the third tumor received 16Gy. His optic chiasm, brain stem and eyes were identified as critical structures.

OUTCOME AND FOLLOW UP:

This patient was seen back in clinic in approximately one month. Clinically, he showed improvement with less difficulty with gait. A follow up MRI showed a significant decrease in the right cerebellar lesion, and the other two lesions were not able to be visualized.

CYBERKNIFE TEAM AT BRACKENRIDGE HOSPITAL:

- Dr. Ron Wilson, Neurosurgeon
- Deb Kosan, Radiation Therapist
- Dr. Stephen Brown, Radiation Oncologist
- Cathy Ramoin, CCRN
- Dr. Ricardo Carrillo, Medical Physicist



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