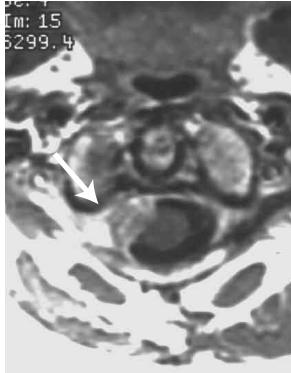
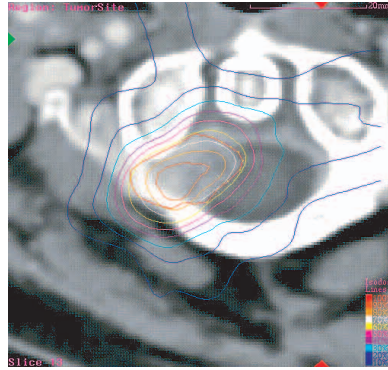


## Spinal Cord Metastasis

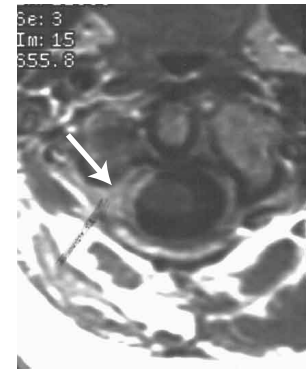
## Extracranial Treatment of a C1-C2 Intradural, Extramedullary Metastasis from Breast Cancer



BEFORE TREATMENT



CYBERKNIFE TREATMENT PLAN



4 MONTH FOLLOW-UP

Courtesy of M. Davis MD & S. Chenery PhD, Newport Diagnostic Center, Newport Beach, CA USA

## Patient History

A 51-year-old female previously diagnosed with infiltrating ductal carcinoma presented with recurrent metastatic breast cancer. A solitary cerebellar metastasis was documented when the patient was 48, and the patient underwent surgical resection and radiotherapy (40 Gy to the whole brain and a boost of 20 Gy to the posterior fossa and the upper portion of the cervical spinal cord), followed by chemotherapy. Eighteen months later, she developed diplopia that resolved spontaneously. An MRI of the brain at that time showed an intradural, extramedullary metastasis at the C1-C2 level producing very mild distortion of the spinal cord.

## CyberKnife Advantage

The patient was not a candidate for conventional radiotherapy due to the recent history of spinal cord irradiation. The location of the metastasis, which was below the limit of frame-based systems, also precluded conventional stereotactic radiosurgery.

## Treatment

The patient was treated on the frameless CyberKnife System at Newport Diagnostic Center with 5 fractions to a total target peripheral dose of 20 Gy.

## Outcome &amp; Follow-Up

Four months after treatment, the tumor volume was reduced to 6% of pre-treatment volume. No further change in tumor size was detected at 15 months post-treatment, and the patient did not exhibit any symptoms of spinal cord damage.