

Recurrent Head and Neck Cancer: A Case for Retreatment to Relieve Severe Facial Pain

by > David Grisell, DO

Clinical problem

This 59-year-old man presented with locally recurrent squamous carcinoma of the right tonsil one year following neoadjuvant radiation therapy and primary surgical resection in June 2003. He was treated with 4 cycles of Cisplatin/Taxotere as salvage therapy but with no response. Treatment was then changed to Taxol alone, but his disease progressed to the skull base with bone erosion shown on CT. He now presents with severe pain in the right face and temporal region, which is poorly controlled on high dose morphine. Physical exam reveals swelling in the right face and pharynx and cranial nerves V₂ and VII deficits on the right. CT and MRI confirm a large mass involving the right parapharyngeal space eroding into the clivus, jugular foramen, and encasing the carotid artery.

Treatment options

The principle options for salvage treatment of recurrent head and neck cancer are surgery, radiation therapy, chemotherapy, or combined treatment. All of these options are associated with substantial risk of toxicity and modest success at local control, but offer significant palliative benefit in some patients. In this case, surgery was not an option due to the location and extent of recurrence. Chemotherapy had already failed to produce any response. He was referred for consideration of stereotactic radiosurgery (SRS) for palliation.

Comments

SRS was not recommended in this case due to the large size of the recurrent mass, the immediately adjacent critical structures, and the fact that the entire volume had received a previous substantial therapeutic dose of radiation. However, intensity modulated stereotactic radiotherapy (IMSRT) or fractionated SRS was offered with sensitizing 5FU chemotherapy, as an alternative associated with equal probability of benefit but lower risk. The Radiation Therapy Oncology Group (RTOG) has investigated re-irradiation with chemotherapy with mixed results¹, however this study used larger radiation fields and conventional radiation techniques. The patient chose to proceed with IMSRT to relieve his pain.



Figure 1. An IMSRT treatment plan was developed to treat the grossly visible tumor + 1.0 cm margin (pink). Twelve separate beam directions were selected to avoid the brain and brainstem (previously treated to tolerance) and minimize dose to opposite parotid gland.

References

1. Horwitz E, Harris J, Langer C, Nicolaou N, Kies M, Curran Jr, W, Wong S, and Ang K: RTOG 9911: Phase II Study of Concurrent Chemotherapy and Re-Irradiation for Recurrent Head & Neck Cancer. 6th Int'l Conference on Head and Neck Cancer, Washington, DC, AHNS 6th Abstract Program Book, pp. 249, 2004.

How to refer

Because of the specific nature and complexity of the services we provide, patients must have a consultation with one of our physicians prior to being referred to the center. To schedule an appointment with one of our physicians, please contact Precision Radiotherapy at 513-475-7777. Additional information is available on the web at www.precisionradiotherapy.com.



The Precision Radiotherapy Center

The Precision Radiotherapy Center provides an option for patients with tumors or other neurological disorders. Developed by the Mayfield Clinic and University Radiology Associates, two nationally recognized neuroscience programs affiliated with the University of Cincinnati College of Medicine, Precision Radiotherapy is the region's first center to offer high-precision radiotherapy/radiosurgery for tumors and other abnormalities both inside and outside the brain. We can target benign and malignant tumors of the brain, head and neck, as well as tumors elsewhere in the body, such as the prostate, spine, liver and lung. Patients also come to us for treatment of vascular malformations, trigeminal neuralgia, acoustic neuromas and pituitary adenomas.

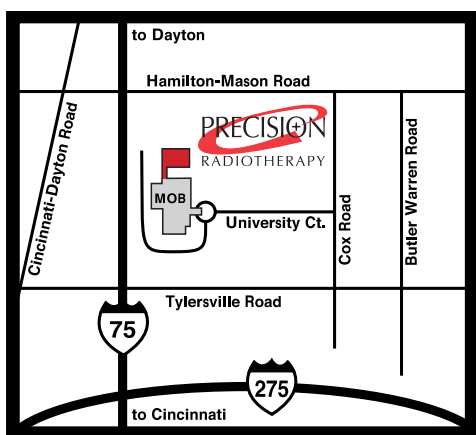
Hours of Operation

Monday-Friday, 8:00 a.m. - 5:00 p.m.

Directions

The Precision Radiotherapy Center is conveniently located on I-75, just north of Cincinnati at University Pointe, 7710 University Court, in West Chester, Ohio. For detailed directions, visit our website:

www.precisionradiotherapy.com



The Precision Radiotherapy Team

Precision Radiotherapy is one of the most progressive treatment centers in the Midwest, featuring a team of internationally recognized specialists and highly skilled staff:

Radiation Oncology

Radiation oncologists of University Radiology Associates are board-certified physicians with specialized training in treating tumors and other lesions with various forms of radiation.

William Barrett, MD
John Breneman, MD
David Grisell, DO
Kevin Redmond, MD

Neurosurgery

Neurosurgeons of the Mayfield Clinic provide initial patient evaluation, treatment planning and follow-up for all neurosurgical patients treated.

George Mandybur, MD
William Tobler, MD
John M. Tew, Jr., MD
Ronald Warnick, MD

Radiology

Radiologists from University Radiology Associates work with the team to precisely identify the target area for radiation treatment.

Robert Lukin, MD
Mary Gaskill-Shiple, MD
Gavin Udstuen, MD

Radiation Therapy

Radiation therapists of Precision Radiotherapy are state-licensed, highly trained health professionals who deliver radiation treatment according to specific protocols. They are registered by the American Registry of Radiologic Technologists (ARRT).

Medical Physics

Medical physicists of Precision Radiotherapy are health professionals with special training in radiation physics, are responsible for maintaining and calibrating the equipment used to deliver radiation.