

Case study: Trigeminal Neuralgia

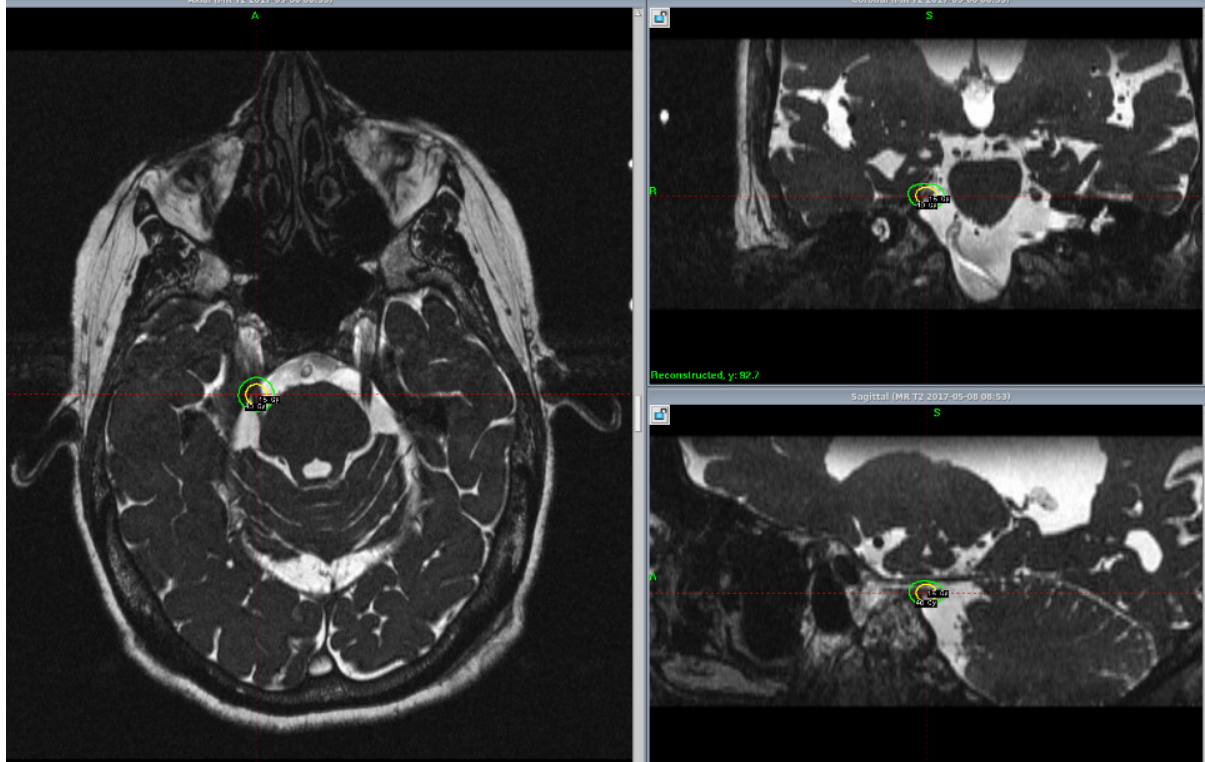


Figure 1 (above): T2 weighted MRI images on the day of treatment with the treatment plan to the right trigeminal nerve overlaid.

Patient 69 year old female

Diagnosis Right sided trigeminal neuralgia

Treatment 80Gy to 100% isodose in a single fraction

Patient History

This patient was diagnosed with right sided trigeminal neuralgia in 2013. She suffered from a severe attack in April 2015 which required hospitalisation. Following this her pain was initially controlled with medication but by June 2016 she had become refractory to this and was suffering from significant side effects. Further treatment was therefore indicated and she was considered suitable for Gamma Knife treatment.

Treatment

On the day of treatment the trigeminal nerves were imaged using T1 and T2 (figure 1) weighted MRI images. The right trigeminal nerve was identified and treatment was planned to the cisternal part of the trigeminal nerve at 7.5 mm from its origin from the brainstem. 80Gy was delivered to the 100% isodose in a single fraction.



Follow up

The patient was reviewed in clinic two months post treatment and her pain was controlled. She had started to reduce her medication and was benefitting from reduced side effects that these had caused. Now, one year later she is pain free and no longer taking medication.