



Botox Treatment for Hemifacial Spasms Secondary to Chondrosarcoma: A Case Report

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Case Description

A 63-year-old female with past medical history of melanoma, breast cancer and cerebellopontine angle tumor (Chondrosarcoma) that was referred to the cancer rehabilitation outpatient clinic by neurosurgery for evaluation of right sided hemifacial spasms. The patient’s symptoms started one year prior. The etiology was due to compression/irritation of the seventh cranial nerve by a recently diagnosed Grade 2 Chondrosarcoma. She failed treatment with muscle relaxers, anti-epileptics and anti-spasmodics.

Intervention

She underwent multiple neurolysis procedures over several sessions using Onabotulinum Toxin A (Botox) with great improvement. The primary muscles included the orbicularis muscles of the eye and mouth.

Table: Muscles injected, Total Units, Sites & Dilution Ratio

Muscle	Units	Sites	Dilution (Normal Saline:Botox)
Right Lateral Orbicularis Oculi	10	Two	1:1
Right Medial Orbicularis Oculi	7	One	1:1
Right Inferior Orbicularis Oculi	5	One	1:1
Right Platysma	10	Two	2:1
Right Superior Orbicularis Oris	10	Two	2:1
Right Lateral Orbicularis Oris	10	Two	2:1
Right Inferior Orbicularis Oris	10	Two	2:1



Results

The patient experienced rapid, effective and long-term relief of her spasms. She was content with her outcome and followed up in clinic for re-injections of Botox.

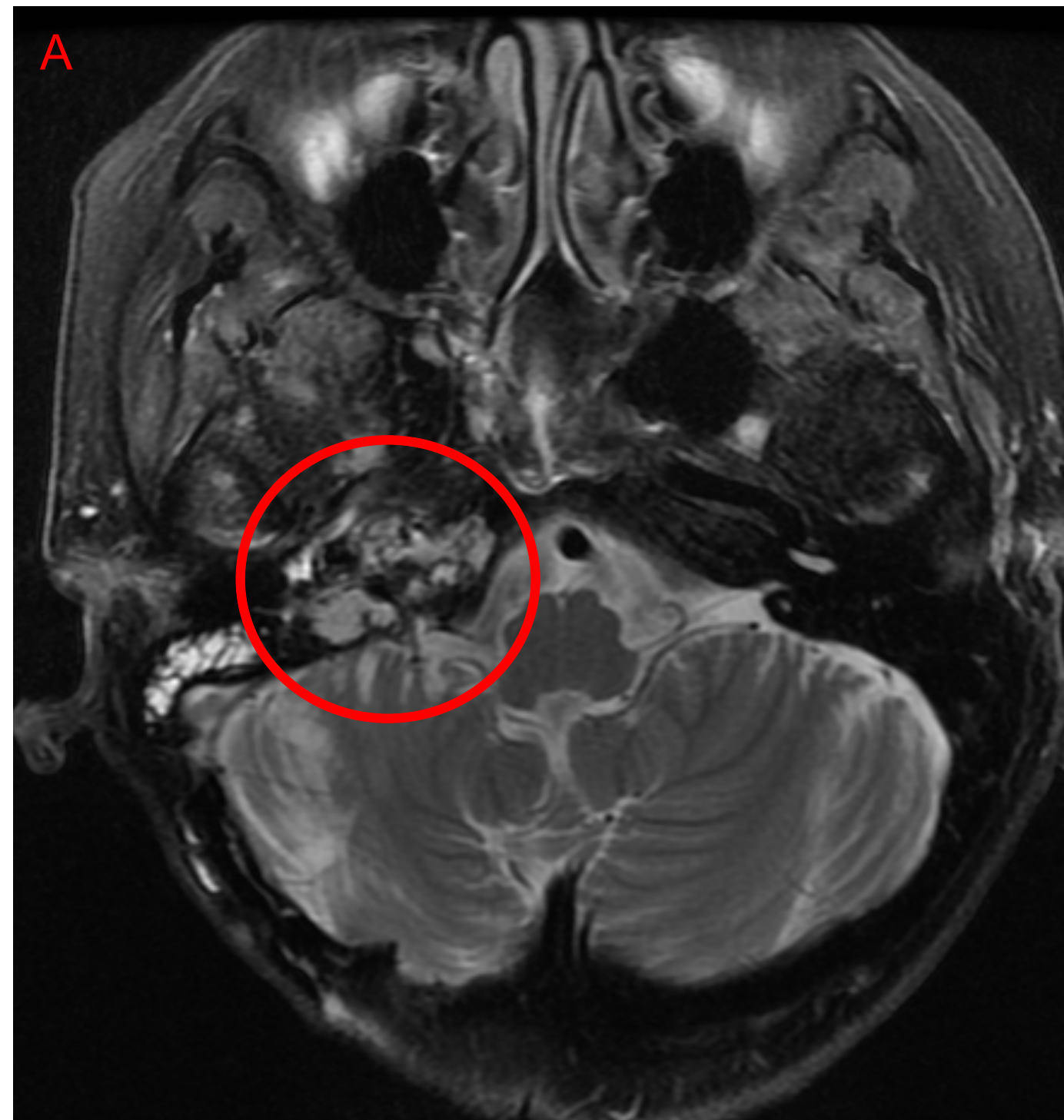


Figure A. Chondrosarcoma 33mm at widest dimension.
Figure B. Calcified portion of chondrosarcoma with mass effect upon the middle cerebellar peduncle.

Adverse Events

Our patient experienced facial droop and asymmetry; both of which required changes in dosing and muscle selection with follow up injections.

Discussion

Hemifacial spasms due to cerebellopontine angle tumors are relatively uncommon and is more commonly due to vascular causes or schwannomas. Our patient had a Grade 2 Chondrosarcoma, which is less likely to progress and involve the seventh cranial nerve leading to hemifacial spasms. There are no reported cases of hemifacial spasms secondary to chondrosarcoma being treated with Botox with significant improvement. As physiatrists, it is important to recognize the utility of neurolysis procedures in oncology patients and the potential long-term relief that it can provide.

Conclusions

Our patient had hemifacial spasms that were significantly disruptive to her work/home life. Her symptoms added to the stresses of a new cancer diagnosis and affected her social life. We were able to help control her symptoms without using daily medications or surgical intervention.

References

The University of Texas – MD Anderson Cancer Center Electronic Medical Record Retrieved on September 10, 2020