

#### Unlocking the Potential of Brainstem Mapping and Reflex Monitoring in Pontine Tumor Biopsy P Rodriguez, P Torralba, MJ Tellez, S Ulkatan Intraoperative Neurophysiology Department, Mount Sinai West Hospital, New York, USA

## **CASE REPORT**

54-year-old female with breast cancer metastatic disease with unsteady gait and a recent fall

MRI showed R Pontine tumor close to the Facial nuclei, Trigeminal sensory nuclei, and lemniscus pathways.

## **MONITORING STRATEGY**

- BAER
- CoMEP: Oculi, Masseter, Nasalis, Oris, Glossopharyngeal, Vocal muscles.
- Free running EMG
- Cranial nerve mapping
- **Brainstem reflexes:** Blink reflex, Laryngeal adductor reflex.
- MEP / SEP







**CORTICOBULBAR EVOKED POTENTIALS** 

#### **BLINK REFLEX**: True continuous monitoring



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### **CONCLUSIONS**:

- permanent injure to neural structures.
- interconnections located within the brainstem.

#### **REFERENCES**:

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**Mapping** the fourth ventricle was key to access the tegmentum without

# Blink reflex Monitoring alerted about Facial Nuclei, Trigeminal Nuclei, and their