

Cervical Spinal Tumors - Case series Karthik H. Madhavan MD; Daniel Franco; Lee Onn Chieng BS; Glen R. Manzano MD [Institution]



#### Introduction

Spine is the most common site to have bony metastasis and up to 70% of patients with malignancy have risk of developing spine metastasis. As there is significant improvement in the diagnostic imaging, spine metastasis are detected much earlier. In this abstract, we present our series and outcome of cervical tumors treated at our institution between 2008-2016.

#### Methods

After obtaining IRB approval a retrospective chart review of all the patients who underwent surgery for cervical tumors during the period of 2008-2016 were identified. A detailed chart review was performed. Data on presenting symptoms, history and examination, imaging, operative records and follow up clinical notes, type of primary cancer, stage at presentation, preoperative interventions, history of adjuvant therapies (chemotherapy, radiotherapy, etc.), and complications were reviewed. Demographic factors, such as sex, age, race, and comorbidities were reviewed.

# Results

We identified 14 patients with age range between 24-80 years with neck pain being the most common presenting symptom and 3 of them due to compression fracture. The primary malignancy was noted to be melanoma(3), multiple myeloma(3), sarcomatoid carcinoma of lung(1), small cell lung cancer(1), male breast adenocarcinoma(1), esophageal adenocarcinoma(1), Hodgkin lymphoma(1), chondrosacroma(1), medullary thyroid(1) and osteoblastoma(1). 7 patients had previous radiation and 7 previous chemotherapy. A total 14 surgeries were performed on 13 patients with 9 decompression and fusion, 3 corpectomy, one minimally invasive decompression and one laser ablation. 4 patients had local recurrence of tumor as evaluated on MRI studies, 1 patient was documented to have disseminated disease and 1 died, the remaining 7 had no long term complications locally.

### Conclusions

Cervical metastasis is less common than thoracic and lumbar spine due to proportionally higher blood supply. Presentation involved symptoms of cord compression or cervical fracture. Cervical decompression definitely improves the quality of life but larger studies are required to demonstrate improved survival.

## **Learning Objectives**

By the conclusion of this session, participants should be able to: 1) Describe the importance of spine surgery in management of cervical tumors 2) Identify known complications of each surgical type.

### References

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