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Abstract

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Abstract

Objectives:

To create a workflow for an efficient ZAP-X stereotactic radiosurgery (SRS) program.

Methods:

A ZAP-X SRS program was developed at Jersey Shore University Medical Center with the following personnel: 1 Radiation Oncologist, 1 Neurosurgeon, 1 Physicist, 1 Radiation Oncology Nurse, 2 Radiation Therapists, and 1 Secretary. One backup personnel for each division. Clinical workflow consisted of: 1.) Physician referral; 2.) Rad Onc consultation; 3.) CT and MRI simulation; 4.) Neurosurgeon and Rad Onc contouring; 5.) Treatment planning with Physician approval; 6.) Initial fraction with Neurosurgeon presence; 7.) Patient discharge with 4-week Rad Onc follow-up.

Results:

From October 2023 to September 2024, 158 patients were treated successfully. The average patients treated per month was 13 ± 2 . The maximum patients treated in a day was 5. The median time from Rad Onc consult to sim was 1.5 days (interquartile range: p25 = 0 days, p75 = 9 days), from sim to treatment 7 days (p25 = 6 days, p75 = 10 days), from consult to treatment 12 days (p25 = 7 days, p75 = 19 days). The median time for malignant patients from consult to sim was 0 days (p25 = 0 days, p75 = 7 days), from sim to treatment 6 days (p25 = 5 days, 8 days), from consult to treatment 9 days (p25 = 6 days, p75 = 18 days).

Conclusion(s):

Implementation of an effective workflow for ZAP-X SRS helps streamline the treatment process, possibly leading to more positive patient outcomes. The workflow can be used as a framework by other institutions to incorporate into their ZAP-X SRS program.