INTRODUCTION:

Stereotactic radiation therapy (SRT) is a method of delivering precise high doses of radiation to small targets, while minimizing radiation-related injury in adjacent normal tissues. This technique differs from conventional radiation therapy, which involves exposing larger areas of tissue to relatively broad fields of radiation over a number of sessions. SRT delivers these high doses of radiation in a very short time frame as well, between 1 and 5 fractions. There are two types of stereotactic radiation therapy, SRS and SBRT.

Stereotactic radiosurgery (SRS) is a type of stereotactic radiation therapy which refers to treatment of any intracranial site consisting of 1 fraction only. The most common applications of SRS include treatment of intracranial tumors and malignancies, including primary and metastatic tumors, acoustic neuromas, and other benign intracranial tumors such as meningiomas or pituitary adenomas. SRS is an established treatment for arteriovenous malformations and trigeminal neuralgia that has been resistant to other therapies has responded to SRS.

Stereotactic body radiotherapy (SBRT) is the other type of stereotactic radiation therapy which refers to use at any extracranial site or any intracranial site consisting of 2-5 fractions. As with stereotactic intracranial irradiation, high doses of radiation are delivered to a precise target while sparing healthy tissue.

MEDICALLY NECESSARY INDICATIONS FOR RADIATION THERAPY AND TREATMENT OPTIONS:

- The individual has an arteriovenous malformation (AVM) of the brain or spine.

- The individual requires treatment either for the initial management of a primary brain tumor (e.g. acoustic neuroma, meningioma, hemangioma, pituitary adenoma, craniopharyngioma, neoplasm of the pineal gland) or for a recurrence.

- The individual requires treatment of initial or recurrent brain metastases has good performance status (ECOG less than 3 or Karnofsky status 70 or greater) and has
controlled systemic disease (e.g. newly diagnosed, stable systemic disease or reasonable treatment options.)

- The individual has a non-operable spinal tumor (primary, recurrent or metastatic) that is causing compression or intractable pain.

- The individual has trigeminal neuralgia that has not responded to other, more conservative, treatments.

- The individual has a uveal tract melanoma (melanoma of the iris, ciliary body and choroid).

- The individual has Non-Small Cell Lung Cancer and all of the following:
  a. Stage I disease; and
  b. The lesion cannot be removed surgically either because the tumor location makes removal difficult or the member is not a surgical candidate.

**ADDITIONAL CLINICAL REVIEW REQUIRED:**

Stereotactic Radiation Therapy (SRS/SBRT) has not been proven to be superior to conventional therapy and is considered not medically necessary for the following conditions:

- Other non-central nervous system cancers
- Lung (unless above criteria is met) and
- Other cancers including but not limited, breast, prostate, colon, liver and pancreas
- Parkinson’s disease and other movement disorders (e.g. tremors)
- Epilepsy
- Chronic pain syndromes
- Treatment of functional disorders other than trigeminal neuralgia
REFERENCES


