Radiosurgery is a technique where a frame or mask is placed over the patient's head. The extremely well focused radiation is aimed at a target to disrupt neural structures. For motor disorders, radiosurgery is usually a secondary option for patients with essential tremor. Patients that cannot have open surgery or a burrhole may be candidates for this option. Since the surgeon is not recording neural cells and finding the area of tremor, the results are not as good as a Deep Brain Stimulator placement. The target that is used for radiosurgery is an estimate as to where the target should be. Unfortunately, we are all slightly different and for some patients the desired brain target could be a few millimeters off the chosen radiosurgical target. As a result, the patient may get no benefit or only partial benefit.

Radiosurgery is an outpatient procedure. A frame device is placed over the patient to secure the head in place. A scan is performed and the radiosurgery team chooses a target. The patient then gets the treatment which can last about an hour. The patient can then go home.

The risks are that a few. Some patients develop brain swelling that is caused by the radiation. This swelling can cause neurological deficits that are usually temporary.

If you are interested in radiosurgery, you will be directed to a team member that will discuss this procedure with you in greater detail.