**Anesthesia Tips for Brachytherapy**

At Stanford University Medical Center, brachytherapy is performed in the basement of the Ambulatory Surgery Center (ASC), High Dose Radiation (HDR) Suite CC-G473 A, 650-725-4371. Anesthesia is needed for treatments of gynecologic cancers in women and prostate cancer in men.

Overall tips:

* Patients start in the ASC pre-op and return to the ASC PACU when done.
* The brachytherapy suite will be set up by the anesthesia techs. There is no N2O.
* The anesthesia machine currently does not have a “device number”, therefore it does not communicate with Epic. You can manually enter vital signs or paper chart.
* The Pyxis has narcotics, however currently there are no local anesthetics for neuraxial.
* Radiation Therapists do not assist Anesthesiologists with procedures.

Gynecologic Brachytherapy: The 2 brachytherapy approaches are “Tandem and Ovoid” and “Interstitial”. When anesthesia is requested, the anticipation is for a neuraxial anesthetic.

**- Tandem and Ovoid** therapy is used for cervical cancer. The Tandem is a metal tube and the Ovoid are round applicators that sit near the cervix. This is usually an outpatient procedure and usually does not require anesthesia.

* The Tandem and Ovoid are placed in the HDR suite. When anesthesia is requested, it is because the patient cannot tolerate a speculum exam, therefore neuraxial anesthesia is needed for both placement and removal of the T&O.
* Immediately following placement, a CT scan is performed en route to the ASC PACU.
* The patient will remain in the ASC PACU for 1-2 hours (supine and flat) while the treatment is planned. Then she will return to the HDR Suite for a 5-10 minute treatment, after which the applicator and epidural are pulled.

**- Interstitial** therapy is for more advanced gynecologic cancers. Large needles are used which allow for radiation to be delivered to a wider area. This is an inpatient therapy with two treatments per day over 3 days. During their stay, the patient must remain supine and flat.

* The needles are placed in the operating room as this is a sterile procedure. An epidural is requested and will remain in place throughout the patient’s stay.
* After placement, the patient will get a CT scan before returning to the PACU.
* Because the needles remain in place for three days, an epidural infusion should be started and managed by the Acute Pain Team, the patient will receive her radiation treatments without an anesthesiologist at the bedside.

Prostate Brachytherapy: This is performed in the HDR Suite under General Anesthesia. This is a two sessions, outpatient therapy.

- The patient is placed in lithotomy position and the arms are crossed/secured over the chest.

- Under ultrasound guidance, 10-20 needles are carefully placed. This usually takes 1-2 hours during which the patient must remain completely still or the process may need to start over again.

- Once placed and radiation planned, a treatment of approximately 10 minutes is delivered, then the needles are pulled and the treatment is over.

Contacts: Dr. Elizabeth Kidd – April Monk RN 408-832-4247

 Dr. Mark Buyyounouski – Sharon Chin PA 650-497-5436 or pager 25368