

PEACOCK[®] intensity modulated radiation therapy

WHAT IS IT?

PEACOCK intensity modulated radiation therapy (IMRT) from NOMOS[®] is a new type of radiation therapy in which beam intensity is modulated across the treatment field. Rather than a single, large, uniform beam — as in conventional radiation — PEACOCKIMRT conforms hundreds to thousands of radiation beams to the size, shape and location of a tumor.

HOW DOES IT IMPROVE TREATMENT?

Conventional radiation therapy has two major limitations: imperfect target coverage and insufficient radiation dosing. Because of these limitations, radiation delivery can cause damage to normal tissue. PEACOCKIMRT conforms the radiation beams to the tumor shape, allowing physicians to intensify the delivery of radiation to the cancerous region, while minimizing damage to surrounding healthy tissue.

WHO ARE THE BEST CANDIDATES FOR TREATMENT?

PEACOCKIMRT can be used to treat tumors anywhere in the body, but is most beneficial for patients with tumors wrapped around or near sensitive tissue — such as meningioma and acoustic neuroma — or in cases of prostate treatments where the rectum and bladder are nearby. However, other patients may also benefit from PEACOCKIMRT.

- Patients with solid tumors of any size
- Patients with multiple tumors such as metastatic lesions
- Patients that have already received the maximum dose of conventional radiation

HOW WILL PEACOCK IMRT HELP YOUR PATIENTS?

- Offers an increased chance for cure
- Reduces complications such as organ malfunction, xerostomia, and hair loss caused from radiation delivery
- Can treat multiple tumors simultaneously, reducing the number of required sessions
- Can treat previously inoperable, odd-shaped tumors or tumors wrapped around or near critical structures
- Can treat recurrent cancers that may have already received the maximum tolerable dose of conventional radiation

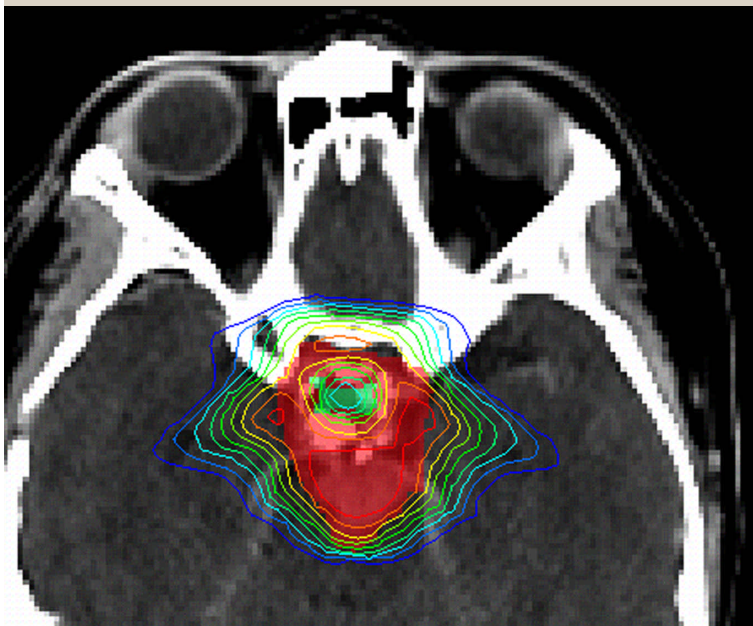


Image courtesy of: Baylor College of Medicine – Houston, TX

CASE STUDY PEACOCK IMRT IN ACTION

This shows a PEACOCK IMRT treatment of a complex tumor wrapped around a critical structure — in this case a craniopharyngioma encompassing an optic chiasm. The multicolored lines encircling the tumor illustrate the gradient levels of radiation delivered to the patient. Because of the conformality achieved by PEACOCKIMRT, the radiation dose to the optic chiasm is significantly less, decreasing damage to healthy tissue.