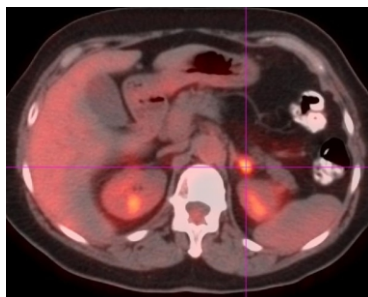


CyberKnife® Stereotactic Body Radiosurgery for Oligometastasis



Adrenal gland before SBRT Treatment



Adrenal gland after SBRT Treatment



Oligometastasis

Cancer can spread to almost any part of the body, although different types of cancer are more likely to spread to certain areas than others. The most common sites of metastasis for lung cancer, not including the lymph nodes, are the adrenal gland, bone, liver, and other lung lesions. The adrenal gland is a common site of cancer metastasis. Surgery may be an option for solitary adrenal metastasis; however, for patients who cannot undergo surgery, radiation is an alternative option.

CyberKnife Treatment Metastasis - Adrenal Gland

Stereotactic body radiotherapy (SBRT) is an ablative treatment option allowing larger doses to be delivered over a shorter period of time. CyberKnife-based SBRT is a safe, non-invasive modality that has broadened the therapeutic options for the treatment of isolated adrenal metastases.¹

Patient Spotlight

Patient is a 68-year old female diagnosed with adenocarcinoma of the lung, EGFR mutant, stage TX NX M1, AJCC stage IV.

Consultation and Diagnosis

Routine radiographic surveillance now demonstrates an adrenal nodule measuring 1.3 x 1.1 cm with an SUV of 5.1. The patient was evaluated for consideration of local radiation therapy delivered to the site to address the oligometastatic lesion involving the left adrenal gland. After consultation, the patient chose to have aggressive local therapy with CyberKnife SBRT to the metastatic nodule.

CyberKnife Treatment

The patient was treated to the left adrenal gland utilizing the CyberKnife image-guided robotic radiosurgery delivery system. 4500 cGy was prescribed in 5 fractions over an elapsed 6 days. The patient tolerated the procedure well without specific acute effects.

Results

The patient has demonstrated complete resolution of the adrenal metastasis from CyberKnife treatment. Patient's disease has remained stable during the past two years since treatment was completed. The patient will follow up with systemic therapy treatment recommendation per Medical Oncology.

Treatment at Illinois CyberKnife

Treatment plans will depend on several factors, including the exact location of the tumor, stage of the disease and the age and general health of the patient. For more information, please call or visit us at 847-723-0100 or www.IllinoisCK.com

¹ Reference: <https://doi.org/10.3389/fonc.2015.00185>

² Reference: NCBI, 2017 (PMC5406171)

In a recent study, the actuarial local tumor control rate was 95% after one year with CyberKnife treatment.² CyberKnife® robotic radiosurgery painlessly delivers precise beams of radiation to tumors and lesions, without requiring incisions, hospitalization, or long recovery time. X-ray images are continually acquired throughout treatment to track any shift and gradual drift. The 6-axis robotic arm then aims each beam of radiation taking into account any translational and rotational changes. The CyberKnife maintains sub-millimeter accuracy automatically, preserving conformal dose distribution, and sparing the surrounding critical structures and normal tissues.

ILLINOIS CYBERKNIFE®

