

**Case Description:**

Patient is a 35-year-old woman with a diagnosis of FIGO IIC2 poorly differentiated squamous cell carcinoma of the cervix after initially presenting with abnormal, heavy vaginal bleeding. She underwent exam under anesthesia, cystoscopy, and cervical biopsies. In the operating room noted was an approximately 5 cm fungating, necrotic cervical mass, replacing the entire cervix. Biopsy of the cervix confirmed poorly differentiated carcinoma, consistent with squamous cell carcinoma. PET/CT demonstrated a necrotic mixed cystic and solid biopsy-proven squamous cell carcinoma replacing and expanding the cervix with extension into the endocervical junction measuring approximately 8 cm (AP) x 7.5 cm (trans) x 9.25 cm (CC) with a maximum SUV of 17.24. Also noted on PET imaging was bilateral pelvic and para-aortic bulky hypermetabolic lymphadenopathy.

She was recommended to receive definitive chemoradiation followed by Syed interstitial brachytherapy. The initial external beam dose was 4500 cGy in 25 fractions to the bilateral iliac nodes (common, internal, and external), bilateral para-aortic nodes, the uterus, ovaries, fallopian tubes, primary cervix tumor, and proximal vagina. She then received interstitial brachytherapy followed by a sequential external beam boost to the PET avid lymph nodes.

**Contouring Homework:**

Contour the ITV\_4500 on the full bladder scan at the level of S2

Contour the bladder on the full bladder scan

Contour the sigmoid colon on the full bladder scan at the level of S1/S2