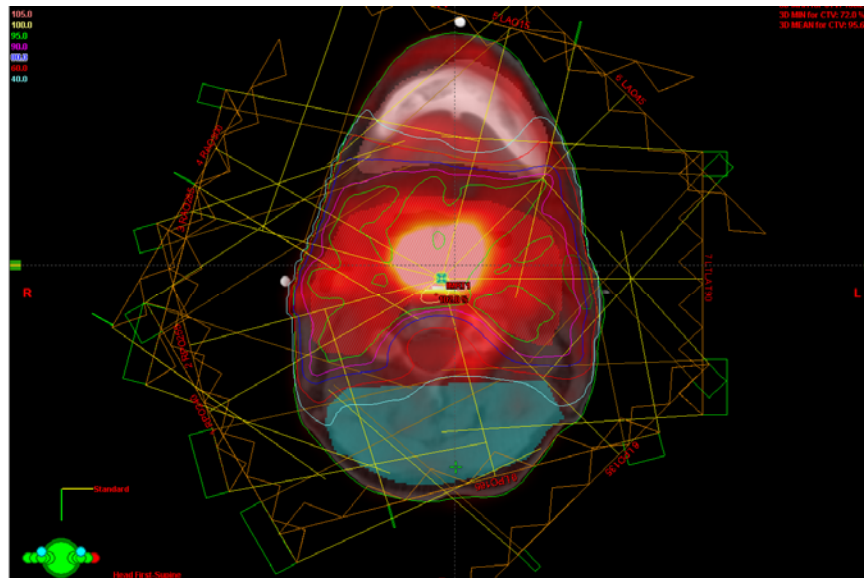
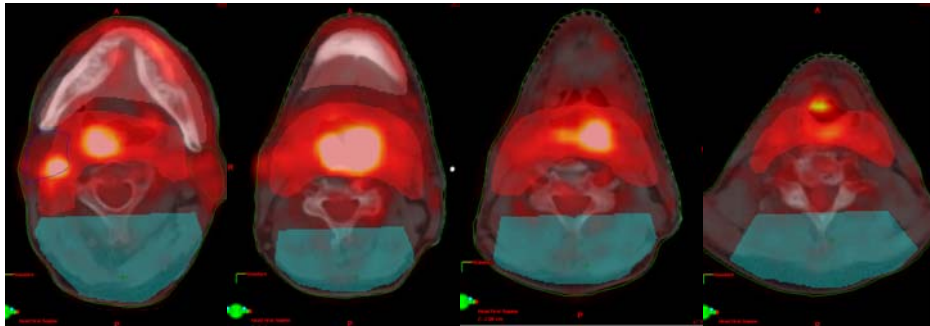


PETIMAGING

INTEGRATED PET/CT SCANNING CASE STUDY N^o 56

PET/CT in Radiation Therapy Planning

A 61 year old male presents with vocal hoarseness and a palpable mass in his neck. CT identifies a 2.4 cm lesion in the hypopharynx and a right jugulogastric lymph node measuring 2.5cm. Incisional biopsy reveals moderately differentiated squamous cell carcinoma. Patient is referred for IMRT along with radio-sensitizing chemotherapy. A PET/CT ordered for staging and radiation therapy planning detects a lesion in the petiole of the epiglottis with an SUV of 5.3. A 4.2x1.3cm area of retropharyngeal lymphadenopathy is identified with an SUV of 13.3. Two markedly hypermetabolic right level IIA lymph nodes are identified measuring 1.7x1.3cm and 8mm respectively. Margins for IMRT are calculated via PET/CT to ensure delivery of adequate dose to appropriate targets sparing healthy tissue.



PETIMAGING

INTEGRATED PET/CT SCANNING CASE STUDY N° 56

