Abstracts

QUALITY ASSURANCE FOR CLINICAL PRACTICE IN CERVICAL CANCER BRACHYTHERAPY WITH IR-192 SOURCE: IN VIVO DOSIMETRY WITH QED DIODES

Introduction/Background To investigate the correlation between the dose predicted by the treatment planning system using three-dimensional (3D)-reconstructed CT images and the dose measured by diode detectors, under clinical condition of high-dose-rate brachytherapy of the cervix uteri. Methodology During each application, 2 QED diode (1115000–2 and 1113000–2) are applied onto patient’s skin at bladder (on top) and rectum level (side) with a bolus of at least 6 cm in water to mimic TPS calculation conditions. A CT-based HDR with a prescribed dose per fraction of 7 to CTV is performed. Measurements are carried both in water and on patient’s skin and are compared to those calculated by the treatment planning system (Elekta Oncentra Brachy 4.5.2). Results The preliminary measurements show a linear response for the examined detectors and a good agreement between measures and calculations (min: 0.4%, max 1.5%). The observed trend between treatment sessions is in agreement with the expectations, making these diodes a suitable tool for routine implementation. Therefore, further measurements are needed in order to make the protocol robust. Disclosures The authors declare no competing interests.

LARGE CELL NEUROENDOCRINE CARCINOMA OF THE CERVIX: ABOUT THREE CASES

Introduction/Background Large cell neuroendocrine carcinoma (LCNEC) is a rare subtype of cervical cancer that accounts for approximately 2–5% of all cervical cancer cases. LCNEC is characterized by a high degree of aggressiveness, early metastasis, and poor prognosis. Methodology In this abstract, we present three cases of Large cell neuroendocrine carcinoma, each with a unique clinical presentation. Results Case 1: A 50-year-old woman presented with abnormal vaginal bleeding and pelvic pain. Further investigation revealed a large tumor in the cervix. A biopsy confirmed the diagnosis of LCNEC. The patient underwent Neoadjuvant chemotherapy and brachytherapy, but developed metastases to the lungs and liver within six months of initial diagnosis. Case 2: A 51-year-old woman presented with postmenopausal bleeding and was diagnosed with LCNEC on biopsy. Further imaging studies showed the presence of metastases to the lymph nodes and liver. The patient was treated with chemotherapy and radiotherapy, but succumbed to the disease after 18 months. Case 3: A 47-year-old woman presented with recurrent vaginal bleeding and was diagnosed with LCNEC on biopsy. Further evaluation revealed metastases to the lungs, liver and bones. The patient underwent chemotherapy, but unfortunately experienced disease progression and passed away within a year of initial diagnosis. Conclusion LCNEC is a rare and aggressive subtype of cervical cancer that poses significant challenges in diagnosis and management. The prognosis for patients with NECC is poor, with a high risk of recurrence and metastasis. While surgery and lymphadenectomy have been found to significantly impact survival rates, chemotherapy and radiotherapy appear to have little to no effect on prognosis. Disclosures All authors declare that they have no conflicts of interest.

SOURCE: IN VIVO DOSIMETRY WITH QED DIODES

CERVICAL CANCER BRACHYTHERAPY WITH IR-192

QUALITY ASSURANCE FOR CLINICAL PRACTICE IN CERVICAL CANCER BRACHYTHERAPY WITH IR-192

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The preliminary measurements show a linear response for the examined detectors and a good agreement between measures and calculations (min: 0.4%, max 1.5%). The observed trend between treatment sessions is in agreement with the expectations, making these diodes a suitable tool for routine implementation. Therefore, further measurements are needed in order to make the protocol robust.

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A RETROSPECTIVE SERVICE EVALUATION OF MARGINS USED TO CREATE PLANNING TARGET VOLUME (PTV) IN DEFINITIVE EXTERNAL BEAM IMAGE GUIDED RADIOTHERAPY (IGRT) FOR CERVICAL CANCER AT THE ROYAL DEVON UNIVERSITY HEALTHCARE

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