Experience from CBCT monitoring (organ filling and ITV margins)

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EMBRACE-II

Image guided intensity modulated External beam radiochemotherapy and MRI based adaptive BRachytherapy in locally advanced CERVical cancer

We also review the CBCTs for the non-mover patients in the first few fractions 2 or 3 times, in case of unexpected motion, we constructed a PotD set based on CBCT contours.
Agreement between on-line plan selection and off-line expert panel: 93%
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Image guided intensity modulated External beam radiochemotherapy and MRI based adaptive BRA chemotherapy in locally advanced Cervical cancer
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Delineation on CBCT scans

Full plan
Empty plan
Robust plan
* = Significant difference
Scatter plots of daily irradiated volumes V42.75 Gy, V40 Gy and V30 Gy of rectum and bladder for the delivered ART fractions and the non-ART scenario. Each circle represents one fraction.
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Image guided intensity modulated External beam radiochemotherapy and MRI based adaptive BRT therapy in locally advanced Cervical cancer

Seppenwoolde et al. Impact of organ shape variations on margin concepts for cervix cancer ART Radiotherapy and Oncology 2016 120(3)
EMBRACE-II reporting policy for patients with library of plans

- Centers are allowed to treat patients with their local ART protocol
- In the database, a field is present to indicate that adaptive treatment is given
- Report EMBRACE-II parameters based on the planning CT (mostly full bladder scan)
- Centers should keep track of which plan is given in which fraction and store all dose distributions for later analysis in their own systems