

Dear JCB Readers,

While the Summer ends, the Polish Brachytherapy Society (PBS) awakens. A few days left to our **8th Biannual Conference of the PBS**, which will be held on September, 15-16 in Wroclaw (Poland). The meeting motto is **“Full steam ahead! – effectiveness, precision, brachytherapy”**, emphasizing the efficient role of brachytherapy in oncological care in Poland. The meeting’s multidisciplinary character will be an opportunity for oncologists and scientists from domestic and large European centers to exchange their experiences and results. Sessions will be conducted in Polish and English, and the event will be live-streamed for those not able to visit the beautiful city of Wroclaw. For detailed information, kindly visit <http://konferencja.brachyterapia.com/en/english/>. You’re cordially invited to join us!



The JCB 4/2022 issue contains seven clinical papers, three physics contributions, a single technical note, and two review papers. Five out of seven clinical articles are on gynecological malignancies. We start with Noriyuki Okonogi *et al.* (Japan) multi-institutional report on image-guided BT for cervical cancer (CC). Then, Leonel Varela Cagetti *et al.* (France) presented their early clinical outcomes of hybrid BT for locally advanced CC. The technique is essential to obtain a favorable scenario at the time of BT to treat locally advanced CCs correctly. From the third manuscript submitted by a Chinese group, we can learn that different individualized therapeutic strategies should be considered for patients with high-risk CC (adenocarcinoma, pre-treatment SCC-Ag, and involved lymph nodes). In the fourth paper, Giuseppe Facondo *et al.* (Italy) examined QoL and sexual functioning in patients with intermediate- and high-intermediate risk endometrial cancer treated with an exclusive adjuvant one-week HDR vaginal BT schedule. The fifth communication came from Thailand, and its’ authors compared in a randomized manner changes in the dose and volume of organs at risk during in-room and out-room image-guided BT. They found no significant differences and recommended an out-room technique for routine practice in high workload centers.

Nicola J. Nasser *et al.* (USA, Canada) proposed control charts for quality evaluation of LDR-BT for prostate cancer. These charts helped identify cases with out-of-control variability in post-plan prostate LDR dosimetry.

Based on a research, a German group from Magdeburg, well-experienced in administering HDR-BT to liver malignancies, stated that sarcopenia does not limit overall survival after interstitial BT for breast cancer liver metastases.

Physics contributions are always welcome! In the current issue, An-Sofie Verrijssen *et al.* (The Netherlands) described an adaptation of intra-operative (IO) electron RT technique to achieve a comparable surface dose to the dose delivered by IO brachytherapy. Next, Cédric Bélanger *et al.* (Canada) presented results of the commissioning of graphics processing units (GPU)-based multi-criteria optimizer combined with plan navigation tools for HDR-BT. The investigated workflow was successfully integrated into the clinical workflow and validated against used treatment planning systems (TPSs). The third physics manuscript by Lalida Tuntipumiamorn *et al.* is on a patient safety program and incident review of HDR-BT at an academic center in Thailand. The low dosimetric error rate evidenced their program’s effectiveness.

The single technical note is on dosimetric comparison of two afterloaders and TPSs in vaginal HDR-BT. Deborah Marshall *et al.* (USA) demonstrated that the effect of source characteristics might produce up to 37% difference in dose homogeneity, when comparing two afterloader/treatment planning systems, independent of cylinder geometry.

And the last two papers I would like to highlight are reviews. The first is a meta-analysis by Jiao Hong *et al.* (China) on iodine-125 seed insertion with trans-arterial chemical infusion for advanced lung cancer (ALC). They suggested combined treatment improved efficacy in clinical ALC cases, excluding severe adverse events. In the last paper, Fariba Tohidinezhad *et al.* (The Netherlands) systematically reviewed prediction models for BT-induced rectal toxicity in patients with locally advanced pelvic cancers. They found that existing models have a limited clinical application due to poor methodological quality, and provided some proposals for future research.

Have an excellent lecture!

Yours sincerely,
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