

Dear Brachytherapy Practitioners,

While welcoming you to a brand new 15<sup>th</sup> JCB publishing year, I take the opportunity to invite you all to participate onsite or online in RART 3<sup>rd</sup> Edition (Recurrence After Radical Treatment, the Polish Brachytherapy Society congress endorsed by ESTRO), which will take place on March, 24-25, 2023 in Katowice, Poland. For more details, please visit: [www.rart.com.pl/en/english/](http://www.rart.com.pl/en/english/).

The JCB 1/2023 issue contains eleven diverse manuscripts: five clinical papers, a technical note, three physics contributions, and two case reports.

The issue opens with a manuscript by Ken Yoshida *et al.* (Japan) on the institutional long-term oncological outcome of HDR multicatheter interstitial BT for adjuvant APBI after breast-conserving surgery. Concerning the 2009 GEC-ESTRO risk stratification scheme, they achieved a 10-year LC rate of 100%, 100%, and 91% for patients considered low-, intermediate-, and high-risk, respectively. The second clinical paper, by Stephen Doggett *et al.* (USA), demonstrated long-term clinical outcomes of non-melanoma skin cancer patients treated with electronic BT. Based on their findings, the treatment was confirmed to be safe and effective, showing an excellent long-term 1.1% LRR in over 180 patients followed-up longer than seven years, causing minimal late toxicities. The following paper from Germany presents the research results on combined CT-guided HDR-BT and transarterial chemoembolization (TACE) with irinotecan-loaded micro-spheres. The combined approach improves LC and PFS in patients with unresectable colorectal liver metastases compared with solitary CT-guided HDR-BT. Such sophisticated treatment schedules provide another pinch of hope for more prolonged survival in this challenging group of patients.

A French group from Lorraine submitted the following manuscript. They assessed prognostic factors of LC and PFS in patients treated for stage T1-2 cervical cancer using utero-vaginal BT following radiochemotherapy. Their results suggest that higher BT doses are necessary for satisfactory LC in stage T2 tumors. At the same time, the lower doses work better in patients with stage T1 tumors, for whom LC is already > 95%. Are you surprised? I advise reading the paper carefully.

Alexandra Stewart *et al.* (United Kingdom) shared their experience with a series of patients before and after the introduction of inhaled methoxyflurane (IMF). The drug appeared to be an easily administered and effective method of decreasing pain during applicator removal following gynecologic BT. Somehow related to this, Subhakar Mutyala *et al.* (USA) presented a single-institutional protocol results on the feasibility of out-patient hybrid BT for cervical cancer with minimal sedation. The approach was feasible at a high percentage, and could be a reasonable option in providing image-guided adaptive BT with limited resources, allowing for more widespread use.

Now, we move to physics contributions. Georgina Fröhlich *et al.* (Hungary) doubted if active dwell positions are always necessary in the ring/ovoids (R/O) channel of cervical applicator in the intra-cavitary/interstitial BT of cervical cancer. The group found that the inactivation of the R/O applicator resulted in similar dose coverage of the target volumes with lower doses to all OARs. In the second physical manuscript, Abolfazl Kanani *et al.* (Iran, USA) proudly presented the development of a multi-purpose quality control phantom for MRI-based treatment planning in HDR-BT of cervical cancer. The phantom is promising as a valuable tool for dosimetric and geometric quality assurance in MRI-based cervix BT. Finally, the third physical paper submitted by an American group is on using a deep learning approach for implanted seed detection on fluoroscopy images in prostate brachytherapy. Although some limitations exist in interpreting overlapping seeds, their model is reasonably accurate and shows potential for further applications.

This time two exciting case reports were accepted for your kind reference. The first, by Mark Dumago *et al.* (Philippines), focused on a successful clinical outcome of HDR intra-cavitary BT combined with nodal EBRT for challenging skin SCC of the external auditory canal. Technical details reveal administration of the technique. The latter, by Mingli Yuan *et al.* (China), presented iodine-125 seed BT combined with pembrolizumab for advanced NSCLC after the failure of first-line chemotherapy. The authors reported their two successful cases and prepared a comprehensive literature review.



Yours sincerely,  
 Adam Chicheł, MD, PhD  
 Editor-in-Chief,  
 Journal of Contemporary Brachytherapy