Dear Brachytherapist and Associates,

I write this letter just before the World Congress of Brachytherapy, which will be held overseas in Washington DC, USA. I eagerly await this outstanding event, and hope for professional exchange of the most contemporary research and achievements in clinical and physical brachytherapy. I am sure the meeting is going to be successful and fruitful for all participants. I am going to contribute to the whole event, and I hope it will be noted.

Back to the Journal, the JCB 3/2024 issue (May/June) contains ten manuscripts: a unique letter-to-editor, four clinical papers, two physics contributions, and three reviews. The articles discussed head-and-neck (H&N) cancers, skin tumor, gynecological malignancies, physical aspects, and deep hyperthermia.

I wish to start with a scoping review of the evolving landscape of H&N brachytherapy (BT) submitted by the group from Philippines. They identified recent trends in H&N BT, such as application in other H&N sites, use of LDR seed implants, perioperative BT, and 3D printing in template design. Data from this publication provide a foundation for further investigations, which can generate evidence for succeeding guidelines.

In the second review, Chinese authors summarized the dose-effect relationship in external beam radiotherapy (EBRT) combined with BT for cervical cancer (CC). They included thirty studies: 11 on dose-response relationships for clinical endpoint and 19 on dose-toxicity relationships for OARs. The most common dose-response relationship between the same dose parameter and the same clinical endpoint was HR-CTV D_{90} vs. local tumor control. At the same time, it was D_{2cc} of rectum versus rectal G2-4 side effect for dose-toxicity relationship.

The third review is a meta-analysis on the incidence of vaginal toxicities following definitive chemoradiation in intact CC. Shraddha Raj *et al*. (India) concluded that vaginal toxicities are expected, with vaginal stenosis being predominant. They emphasized that standardization of toxicity scoring methods and dose reporting parameters is crucial for accurately comparing and interpreting findings.

Prof. Erkan Topkan *et al*. (Turkey) submitted a letter to the Editor-in-Chief regarding "Adjuvant pulse-dose-rate brachytherapy for oral cavity and oropharynx carcinoma: Outcome and toxicity assessment of 66 patients" [1]. It includes presentation of their point of view, own data and experience contribution as well as polemics.

Of the four listed clinical papers, the first relates to the hot topic of 3D printing (3DP) technology, which has greatly impacted skin cancer BT. Michał Półtorak *et al*. (Poland) described their practice development, implementation method, clinical applications, and treatment results assessment. Their work is another proof of the effectiveness of 3DP applicators in treating inoperable skin cancer lesions with high precision and efficacy. You are invited to refer to other related manuscripts previously published [2-4].

The following two clinical papers relate to CC. The first written by Euncheol Choi *et al*. (Southern Korea) presents the work on the significance of bladder morphology in dose distribution planning during MRI-guided BT for CC. The study underscored the substantial impact of bladder shape on the optimal bladder filling volume and the maximum absorbed dose during CC intracavitary BT. The second article by Pittaya Dankulchai *et al*. (Thailand, USA) focuses on the pre-treatment T2-weighted MRI radiomics to predict loco-regional recurrence after image-guided adaptive BT for locally advanced CC. They identified some MR images predictive of loco-regional recurrence.

In the last clinical paper, Yuting Yuan *et al*. (China) retrospectively analyzed the clinical efficacy of ^{125}I seed implantation combined with deep hyperthermia (HT) in malignant tumor treatment. They claimed the combination is an effective therapy for malignant tumors, yielding significant clinical efficacy, enhancing patients' quality of life, reducing tumor burden, mitigating adverse reactions, and alleviating pain.

In the last two physics contributions, Yiannis Roussakis *et al*. (Turkey) conveyed a dosimetric comparison of Acuros BV and AAPM TG-43 algorithms for interstitial ^{192}Ir HDR-BT (breast, H&N, and lung). Kaiqiang Chen *et al*. (China) carried out a dosimetric comparison between single-channel cylindrical applicator and interstitial needles in vaginal BT of gynecological malignancies.

Best regards,
Adam Chicheł, MD, PhD,
Editor-in-Chief,
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References

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