

Dear Brachytherapy Sympathizers,

With great pleasure, I present the last JCB issue this year for your reference.

Please note that it has already been five years since the release of the JCB 1/2019 issue, the first one, which I have edited as the Editor-in-Chief. These years have been filled with a lot of collective work, reading, reviews, editing, learning, and data collection in the field of brachytherapy, to refer to at any time, from any place in the world, and free of charge.

The current JCB 6/2023 issue (November/December) contains eleven manuscripts: six clinical papers, three physics' contributions, one technical note, and a case report.

The first exciting paper was submitted by our devoted Section Editor, Susovan Banerjee (India), who under Indian Brachytherapy Society auspices, conveyed a survey on Indian radiation oncologists current status and their future readiness to embrace prostate HDR-BT. This topic must be investigated worldwide to support better training and improve the access to this recognized treatment method. We have previously published other related reports [1-4].

The subsequent five papers relate to gynecological malignancies. Eugene T Yap *et al.* (Philippines) shared their multi-institutional initial clinical outcomes on a single application CT-guided interstitial HDR-BT delivered in four fractions for locally advanced cervical cancer (LACC). Yeqiang Tu *et al.* (China) presented a clinical implementation of 3D standardized template-guided BT for LACC, which can improve the precision and consistency of the needle insertion procedure, and help to achieve satisfying dose distributions in intra-cavitary/ interstitial implants. An Indian group from Kidwai Memorial Institute compared dosimetric measurements of organs at risk (OARs) and target volumes for ovoids and cylinders in endometrial cancer BT treatment. They concluded that the results are comparable; however, for patients with a "dog ear" vagina configuration, ovoids may be preferable.

On the other hand, authors from China investigated a novel 3D-printed vaginal cylindrical template with curved needle channels dedicated to MRI-guided vaginal cuff BT. Their approach provides good target coverage and OARs sparing, and holds immense promise for its flexibility and broader usage. Finally, Liqiu Ji *et al.* (China) assessed the clinical efficacy of  $^{125}\text{I}$  seeds in treating local pelvic cervical cancer recurrences after previous radiotherapy. Based on their observations, CT-guided seed implantation presents a significant short-term efficacy, especially in patients with recurrent masses less than 3 cm and located in the pelvic wall.

Among physics' contributions, Jeremy P. M. Flanagan *et al.* (Australia) first quantified the effect of eccentric  $^{106}\text{Ru}$  eye plaque placement on tumor-volume dose distribution. As they concluded, less radiation dose is delivered to uveal tumors covered eccentrically, and the tumor (thickness, diameter) and plaque (size, location) parameters modulate the  $D_{98\%}$  significantly. In the second article, Elisa Placidi *et al.* (Italy) identified significant differences in dosimetric parameters for skin tumors BT after TG-43 and TG-186 algorithms comparison, with calculated lower values for the latter. In the third physical contribution, Yuji Kamio *et al.* (Canada) validated clinical workflow for image-guided adaptive CC BT using a Montreal split-ring applicator, for which they used 3D-printed biocompatible patient-specific interstitial prototype caps.

In a single technical report, Madoka Sakuramachi *et al.* (Japan) shared their novel method of sigmoid colon protection in CC BT using hydrogel spacer injected into meso-sigmoid. They claim that such an approach can reduce the dose delivered to OARs and improve clinical outcomes.

The last manuscript, a case report on a simple fabrication technique of a personalized endocavitary BT applicator for maxillary alveolar cancer, was submitted by Warren Baccoro *et al.* (Philippines). As concluded, their simple method is feasible, allows for lowering treatment costs, and prevents treatment delays along with improved patient comfort and convenience.

Wishing you a happy and prosperous New Year 2024!

Yours sincerely,

Adam Chichel, MD, PhD

Editor-in-Chief,

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## References

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