

Dear Friends,

Forty years! Yes, it's been already forty years since the very first HDR afterloader was installed in Poland. It happened in Gliwice in 1983. Recently, we celebrated this anniversary in a very unique and joyful way during last weekend of May. First, all brachytherapy performing specialists (radiation oncologists, medical physicists, nurses, radiotherapists, radiation protection inspectors, and secretaries) met at a sun-drenched picnic. Second, on May 29th, the Scientific Symposium and Jubilee Session occurred at the National Research Institute of Oncology in Gliwice. Once again, we honored late Brigida Białas, MD, PhD, former Head of the Brachytherapy Department in the Institute, and late Professor Janusz Skowronek, former Head of the Brachytherapy Department in the Greater Poland Cancer Center in Poznań. They both made a significant impact on Polish brachytherapy development and position. I took the opportunity to present the wrap-up of JCB activities to the Polish Brachytherapy Society members and invited honorable guests.



The current JCB 3/2023 (May-June) issue contains eleven manuscripts: seven clinical papers, one physics contribution, a technical note, and two case reports.

Tamer Soror *et al.* (Lübeck, Germany) opens the issue with their retrospective report on salvage HDR-BT for locally relapsed prostate cancer after previous radical prostatectomy and subsequent EBRT. This promising approach needs to be further investigated with larger groups of patients. The second paper comes from China. It is a feasibility study on a novel intra-luminal iodine seeds-based BT for patients with esophageal carcinoma causing stage 3-4 dysphagia. The intervention resulted in tumor shrinkage, significant dysphagia score decrease, and improved performance status and quality of life scores. Another Chinese group submitted a manuscript of a 3D template combined with MR-guided iodine seeds-based BT for recurrent brain metastases. They claim the method is feasible, safe, and effective, achieving a 1-year survival rate of 57.1%. The following paper from Poland (Markiewicz *et al.*) reports on the eye plaque displacement as a BT treatment method for large diffuse uveal melanomas with base measurements larger than 18 mm. Such applications can be an alternative for eye enucleation in selected cases, i.e., for patients with only one seeing eye or if patient does not agree for surgery.

The following three clinical articles and a physics contribution relate to gynecological malignancies. Tadashi Takemura *et al.* (Japan) proposed the initial tumor volume as an essential predictor for the indication of intra-cavitary BT, intra-cavitary/interstitial BT, and multi-catheter sole interstitial BT in patients treated with chemoradiotherapy for cervical cancer. As concluded, at least an interstitial technique is recommended for an initial gross tumor volume larger than 150 ml. A group from India submitted their results in a feasibility study on trans-rectal ultrasound-guided hybrid intra-cavitary/interstitial BT in cervical cancer. As presented, TRUS-guided BT provides adequate target coverage with acceptable doses to organs at risk. Finally, Amy Le and Jordan Holmes (USA) investigated the changes in the receipt of adjuvant BT for endometrial cancer patients before and after the Affordable Care Act. The Medicaid expansion was likely not the most significant factor affecting access or receipt of adjuvant RT. The physics contribution by Chuanjun Yan *et al.* (China) is a comparative analysis of dosimetric and radiobiological models of IPSA and HIPO algorithms in combined intra-cavitary/ interstitial BT for cervical cancer. The authors concluded that using the HIPO algorithm with an unlocked uterine tube provides better dose conformability and lower NTCP than IPSA and HIPO-locked tubes.

In a single technical note, Bruno Fionda *et al.* (Italy, Germany) attempted to stretch the therapeutic window for treating skin cancer with multilayer intensity modulated contact interventional radiotherapy (BT). Altered catheter arrangement in treating skin lesions thicker than 5 mm using dynamic intensity modulated BT with different catheter-to-skin distance, enables reaching the best CTV coverage and reducing the maximal skin dose.

Case reports are usually difficult to be published. However, sometimes they are the only reference in rare clinical situations, with no clear recommendations on managing real and special patients. Raj Hans *et al.* (India) presented a successful case of dermatofibrosarcoma protuberans of the scalp treated with surface mold BT with minimal toxicity. The last communication came from Subhas Pandit *et al.* (Nepal). They used single-needle single-dose interstitial BT for internal mammary nodal breast cancer recurrence. The single dose of 20 Gy appeared to be curative.

The summer season starts. Therefore, I wish you a happy lecture and a lovely holiday time.

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