

Dear Readers,

The present year 2020 will surely be remembered as stigmatized by COVID-19. Despite fighting the SARS-CoV-2, oncology providers have especially focused on cancer patients. As many say, the virus causes mostly mild infections, but unfortunately, claims its victims, and cancerous diseases if not treated are the potential field of additional fatalities. In order to cope with problems caused by viral pandemics and to treat our patients efficiently, we present another paper on brachytherapy practice during the current pandemic: A review on the practice changes due to COVID-19. This paper written by our Indian friends from IBS has already been available for some time on our website.

Basing on my clinical practice, I have observed a few cases up-staged because of delayed access to the oncology center. Sadly, part of them will probably be lost. Dear all, assure safe zones in your practices and offer treatment to those who need it here and now.

Again, I am very pleased to present the new, 4<sup>th</sup> issue of "Journal of Contemporary Brachytherapy" this year, which opens with an analysis from the US National Cancer Database on eye plaque brachytherapy versus enucleation for ocular melanoma. The authors' most important conclusion is that patients selected for brachytherapy had improved survival compared to enucleation in all size cohorts of the study.

The following five clinical investigations are on the usage of different kinds of implantable seeds in various clinical indications. Authors from Philadelphia, Rochester, and New York (USA) reported on dosimetric differences between cesium-131 and iodine-125 brachytherapy for the treatment of resected brain metastases. Compared to <sup>125</sup>I, <sup>131</sup>Cs exposed smaller volumes of brain tissue to equivalent doses of radiation, which may result in less incidence of radionecrosis. Eiichiro Okazaki *et al.* (Osaka, Japan) compared post-implant dosimetrics using sector analysis at 24 hours and 1 month, between intraoperatively built custom-linked <sup>125</sup>I seeds and loose seeds for localized prostate cancer. They emphasized the advantage of linked seeds, and details to be discovered in the paper. Representatives of Central South University (Xiangya, China) evaluated TRUS-based dosimetry for <sup>125</sup>I brachytherapy of prostate cancer and stated that this approach is feasible, and TRUS-based dosimetry does not differ significantly from standard CT-based prostate seed dosimetry. Another Chinese group represented by Jie Li *et al.* submitted their findings on <sup>125</sup>I seed CT-based implantation to lung metastases less than 2.5 cm, with a 5 ml syringe used as a guide. They concluded that puncture with such a syringe could be a more accurate option for patients with small lung metastases. The last seed-focused paper comes also from China. Here, a new technique for CT-guided <sup>125</sup>I seeds implantation in patients with malignant airway compression induced by advanced lung cancer is presented, and its effectiveness and safety discussed.

The next four clinical investigations and one physics contribution are related to gynecological malignancies. Authors from Ramaiah Medical College (India) reported the outcomes of interstitial <sup>60</sup>Co-based HDR brachytherapy for cervical cancer in comparison to standard <sup>192</sup>Ir-based HDR-BT. The dosimetric and clinical (control and toxicity) outcomes are similar. Professor Bengt Sorbe *et al.* (Örebro, Sweden) submitted a report on excellent local and pelvic control rates after combined external pelvic chemoradiotherapy and image-guided adaptive brachytherapy of advanced cervical carcinoma. A team of Zhejiang University School of Medicine (China) compared CT- and MRI-based target delineation for cervical cancer BT. As assumed, the delineated ranges of CTV<sub>HR</sub> are significantly over-estimated on CT compared to MRI. Also, CT images involving pre-BT MR images for delineating are still not sufficient, and MRI fusion is required. Yuanqiang Lin *et al.* from China-Japan Union Hospital at Jilin University (China) investigated an application of transrectal ultrasound (TRUS) in guiding interstitial brachytherapy for advanced cervical cancer patients. TRUS showed a strong agreement with MRI results in determining the position of inserted needles. Therefore, as the authors stated, TRUS is a useful tool for guided interstitial brachytherapy and is appropriate for widespread use in the treatment of locally advanced cervical cancer. The last gynecological paper by Jon Hansen *et al.* from the University of Wisconsin (USA) focused on the comparison of catheter reconstruction techniques for lunar ovoid channels of the Venezia<sup>®</sup> applicator. The study revealed that large local dose discrepancies could be reduced, but not eliminated. The choice of reconstruction technique was found to have a relatively limited impact on DVH parameters for regions outside of the vaginal mucosa.

I suppose, most of you have already heard about a productive and innovative group from Italy, which established the INTERACTS supported by AIRO. This time, I proudly present the consensus on sarcoma interventional radiotherapy (brachytherapy) submitted by Luca Tagliaferri *et al.* I would like to congratulate the group for persistence and determination in realizing their extraordinary ideas.

The JCB 4/2020 closes with an educational article from the United Kingdom. Agata Rembielak presents her intriguing paper on complex and prolonged skin toxicity after superficial brachytherapy for BCC on the lower leg. On this occasion, I encourage you to focus on this particular paper accompanied by Agata's and my introduction, in which we seek readers' engagement and receiving comments, thus hopefully continue professional discussions on broad aspects of brachytherapy.

As a closing remark, I want to thank the entire international brachytherapy community for outstanding brachytherapy researches, preparation of manuscripts and efforts involved, and successive cooperation between the Authors, Section Editors, and our numerous and priceless Reviewers.



Yours sincerely,  
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Editor-in-Chief  
Journal of Contemporary Brachytherapy