

Dear Colleagues, Friends, Readers,

this year the fourth issue of our journal is quite special in my opinion. Its opening manuscript is classified as an educational article and is of great importance for some reasons detailed below. These are the *Indian Brachytherapy Society Recommendations for radiotherapeutic management of cervical cancer with special emphasis on high dose rate brachytherapy*.

As one can find out elsewhere, cervical cancer is the fourth most common cancer among women globally, with an estimated 570,000 new cases and 311,000 deaths worldwide in 2018 [1]. The incidence is higher and about 85% of the locally advanced disease cancers are detected in Low and Middle Income Country/Low Income Country (LMIC/LIC) settings, where sufficient resources, especially radiotherapy facilities, are not available [2]. The situation is compounded further with a high burden in rural areas where access to health care is challenging [3]. With all the international organizations and bodies (WHO/UN/IARC/UICC/IAEA etc.) working on a mission to eliminate (prevention, screening and treatment) cervical cancer, the IBS guidelines for management of cervical cancer in LMICs including India are a major step towards this goal.

Numerous guidelines developed and published are mainly for the western world and are of limited value in LMICs including India, which have a unique ethnic and cultural background, disease patterns, health care systems and access to treatment facilities [4,5].

The highlights of these guidelines are as follows:

1. IBS guidelines have been developed keeping in mind regional differences in cultural and socioeconomic factors, availability of resources and expertise, improvements in knowledge and technology, etc., resulting in highly heterogeneous patterns of care [6,7].
2. The guidelines address various processes especially for HDR brachytherapy (BT) which are practical and not addressed explicitly in most of the recommendations, for e.g., importance of use of clinical drawings for documentation of disease, patient preparation, principles of BT techniques and BT applicator selection criteria, treatment planning details including applicator reconstruction methods, BT procedure related complications and management, etc.
3. These guidelines developed by the experts in management of cervical cancer across various parts of India serve as an important comprehensive QA/QC program for the management of cervical cancers to achieve relatively simple uniform implementable treatment protocols, safe and effective practices and eventually patient care and clinical outcome [8].
4. These guidelines developed by IBS may not only be applicable in India, but could be conveniently adopted and utilized by LMIC/LIC countries also. However, there is a challenging and urgent need for further co-operation, collaboration and strengthening of ongoing efforts between international, regional and national organizations, professional bodies, governments and stakeholders to expedite and augment the access to health care, and implement cost-effective pragmatic radiotherapy treatment protocols towards cervical cancer elimination in the world.

We dedicate this article to all professionals around the world who perform gynecological brachytherapy in circumstances of struggling with difficulties, obstacles, shortages of funding and resources and who wish to improve their services to the patients in need, who wish to ensure their service is of top achievable quality in an imperfectly supplied environment.

The second manuscript of this issue confirms what was written above. The authors from India share their experience with PEEK (polyether ether ketone) catheters in the situation when MRI dedicated applicators are not available in the process of treatment of advanced cervical cancer and the use of MRI imaging is recommended.

Another clinical investigation from Germany is on the second breast conserving therapy after ipsilateral breast tumor recurrence (IBTR) and concludes that in the case of small, low-risk IBTR, adjuvant re-irradiation using multicatheter brachytherapy is a feasible, safe and effective treatment method after repeated lumpectomy and plays a vital role of an alternative to mutilating mastectomy.

An interesting presentation of treatment patterns of HDR and LDR brachytherapy as monotherapy for prostate cancer comes from the United States. The paper is based on a huge database of detailed research which revealed an overall decrease in BT monotherapy use since 2004 – the known problem that brachytherapy providers are now trying to fight in many ways.

The next paper, again by authors from Germany, is on the treatment of hepatic pancreatic ductal adenocarcinoma (PDAC) metastases with HDR image-guided interstitial BT (IBT). Overall, IBT is a safe procedure which enables excellent rates of local tumor control and presents a viable anti-neoplastic treatment option as a salvage therapy for metastatic PDAC patients.

Then we have four case reports, all different and challenging: a) Polish authors present individual multicatheter mould technique for HDR BT in a personalized approach in treating facial multifocal angiosarcoma; b) IG-HDR interstitial BT for recurrent rectal cancer after salvage surgery – a case from Japan; c) Russian experience in multicatheter interstitial HDR breast BT with their dose-volume histogram analysis of the first results; d) American description of how to place <sup>131</sup>Cs permanent BT seeds in a large combined cavity of two resected brain metastases in one setting – it appears that such a treatment option may offer excellent long-term local control and a minimal toxicity rate.

For those interested in BT physics we present four contributions on: a) addition of MRI to real-time TRUS-based treatment planning for prostate implants (USA); b) hypofractionated  $^{192}\text{Ir}$  source stereotactic ablative BT with coplanar template assistance in the primary treatment of peripheral lung cancer (China); c) dosimetric comparison of graphical optimization and IPSA for BT of cervical cancer (also China); d) end-to-end test and MOSFET *in vivo* skin dosimetry for  $^{192}\text{Ir}$  HDR BT of chronic psoriasis (Thailand).

Finally, the issue closes with a second educational article on complications and adverse events of plaque brachytherapy for ocular melanoma. In the paper submitted from the USA, several radiation side effects to the numerous anatomical structures of the eye are presented. They include strabismus, cataracts, glaucoma, vitreous hemorrhage, retinal detachment, radiation retinopathy, radiation maculopathy and scleral necrosis. Straightforward and nicely presented.

Dear readers, we wish you inspirational moments with our journal.

Yours sincerely,

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