Journal of Radiotherapy in Practice

cambridge.org/jrp

In this issue

In this issue

Cite this article: Bridge P. (2021) In this issue. *Journal of Radiotherapy in Practice* **20**: 371–372. doi: 10.1017/S1460396921000674

I am pleased to introduce the fourth issue of the Journal of Radiotherapy in Practice for Volume 20 published in December 2021. In this issue, there are 13 original articles on a range of topics which include 3 literature reviews and 2 cases.

The issue starts with Fleming's study into the use of average intensity projections (AVIPs) for 4D plan evaluation metrics. This work concluded that the method was valid but recommended further study on the use of AVIPs in small target volumes or situations featuring significant motion.

The first of this issue's papers from Osei relates to the impact of breathing control on organ at risk (OAR) doses for node positive breast cancer. The study found lower doses associated with deep inspiration breath hold compared to free breathing.

Cameron's audit of malignant spinal cord compression pre and post-COVID-19 identified a reduction in attendance during the pandemic and recommended reductions in treatment duration at this time.

Vasiliki's study into locally advanced rectal cancer planning compared 3D conformal radiotherapy (3DCRT), intensity modulated radiotherapy (IMRT) and volumetric modulated arc therapy (VMAT). The plan comparison concluded that while 3DCRT plans exhibited improved conformity, VMAT plans improved OAR doses, target dose homogeneity and predicted tumour control probability.

Rajkrishna performed a retrospective evaluation of recurrence patterns in 86 intracranial meningioma patients who received post-operative conformal radiotherapy. The study identified local recurrence in grades 2 and 3 meningiomas and recommended increasing clinical target volume margins, using IMRT techniques and escalating dose to 59·4 Gy for these cases.

Chakrabandhu's paper reported overall survival from a cohort of over 2000 squamous cell carcinoma head and neck patients; this work identified cancer site, stage and age at diagnosis as indicators of mortality, highlighting the importance of prevention and early detection.

Vassliev performed a retrospective plan evaluation to identify the impact of flattening filter free (FFF) technology on plans of 15 early stage lung cancer patients. They concluded that FFF beams could reduce OAR doses and improve target coverage.

Sebastian's retrospective review of 98 patients with Vestibular Schwannoma (VS) compared outcomes following microsurgery, stereotactic radiosurgery (SRS) or both. The work concluded that SRS is an effective modality to treat VS less than 3 cm in size. In addition, prior surgery was a statistically significant factor that affected facial nerve function deterioration.

The study by Raj investigated the use of optically stimulated luminescence (OSL) as an in vivo dosimetry tool for head and neck IMRT. Their results demonstrated agreement of OSL to treatment planning systems within 2·77% but recommended separate calibration for different beam energies.

Head and neck IMRT was also the subject of Iqbal's planning comparison study which highlighted key benefits of RapidArc over standard IMRT. RapidArc plans for 25 patients outperformed IMRT on coverage, conformity, gradient and homogeneity indices, delivery time and OAR sparing.

Johnson's paper presented an evaluation of Flamigel for radiotherapy-induced skin reactions and found statistically significant improvement in pain and pruritis severity. The product was favourably perceived by clinicians involved and no adverse reactions were reported.

The second paper in this issue from Osei is a retrospective RapidArc plan evaluation of 179 prostate patients who had been treated with either 78 Gy in 39 fractions (intact prostate) or 66 Gy in 33 fractions (post prostatectomy). Good outcomes were seen from both prescriptions and this work was reported as the basis for standardising treatment pathways.

Tajiki's paper reported innovation in treating bulky radiosensitive tumours with spatially fractionated grid radiotherapy (SFGRT). SFGRT was delivered using a constructed block and 18 MV photons which was found to reduce production of fast and thermal neutrons.

The first of the literature reviews is Kelly's evaluation of the effectiveness of physical exercise in managing fatigue during radiotherapy for prostate cancer patients. The study concluded that although physical exercise is an effective and safe intervention for fatigue management, there is limited evidence of its routine implementation. The paper recommended that patients be educated about the benefits of physical exercise throughout treatment.

Durnin's review attempted to evaluate the radiotherapy information requirements of radiotherapy patients and families but found inconclusive evidence relating to underlying factors. Their data indicated that a range of formats should be utilised and that each patient has unique and individually specific information needs.

© The Author(s), 2021. Published by Cambridge University Press.

CAMBRIDGE UNIVERSITY PRESS

The final review in this issue is from Cantrell and related to the contraindication to radiotherapy arising from pre-existing Inflammatory Bowel disease (IBD). The review suggested that there was a low incidence of severe sequelae and accordingly that patients with IBD should still be considered for definitive radiotherapy.

Gong reported a case of Merkel Cell Carcinoma of the left cheek arising in an 82-year-old patient that was successfully treated with radiotherapy monotherapy without severe toxicities.

The final article in this issue is Kellogg's case, which reported a unique 'prone' head and neck immobilisation technique for a patient with sinus congestion and thus unable to tolerate supine positioning. The prone position was well tolerated and eliminated the need for daily anaesthesia for airway secretion management. Dosimetry demonstrated good target coverage and normal tissue sparing, and the setup was reproducible throughout the course of therapy.

Dr Pete Bridge

https://doi.org/10.1017/S1460396921000674 Published online by Cambridge University Press