Journal club – March / May 2024

Red journal
The Pediatric Normal Tissue Effects in the Clinic (PENTEC) special issue.

The PENTEC issue is the combination over decade of international collaboration by more than 150 physicians, physics and epidemiologists organized into 18 organ specific working groups with the aim of synthetizing the best available evidence to better perform radiation treatment planning and dosimetric issues specific to pediatric radiotherapy and to provide guidelines on toxicities, risk assessment and dose volumes.

https://www.redjournal.org/issue/S0360-3016(24)X0005-X

Green journal

Zilli T, Franzese C, Guckenberger M, Giaj-Levra N, Mach N, Koutsouvelis N, Achard V, Mcdonald A, Alongi F, Scorsetti M, Constantin G, Bertaut A, Miralbell R. ONE SHOT - single shot radiotherapy for localized prostate cancer: 18-month results of a single arm, multicenter phase I/II trial. Radiother Oncol. 2024;194:110181.

The ONE-SHOT trial is a prospective, multicenter, single-arm phase I/II study designed to evaluate the efficacy and safety of single fraction prostate stereotactic body radiotherapy (SBRT) for localized prostate cancer. SBRT consists of 19 Gy to the whole gland with urethra sparing (17 Gy) and real-time electromagnetic image guided RT (IGRT) tracking. In total 45 patients with localized prostate cancer were recruited. Among the 45 patients included in the trial, 43 were retained for the present analysis. Urinary and rectal toxicity was mild at the 18-month follow-up. Impact on quality of life was minimal and biochemical response rate acceptable. Longer follow-up is needed to assess long-term toxicity and disease control.

https://pubmed.ncbi.nlm.nih.gov/38403022/

La radiologia medica

Becherini C, Salvestrini V, Desideri I, Vagnoni G, Bonaparte I, Bertini N, Mattioli C, Angelini L, Visani L, Scotti V, Livi L, Caini S, Bonomo P. Impact of fosaprepitant in the prevention of nausea and emesis in head and neck cancer patients undergoing cisplatin-based chemoradiation: a pilot prospective study and a review of literature. Radiol Med. 2024;129(3):457-466.

Cisplatin-based chemoradiotherapy (CRT) represents the standard of care in the management of locally advanced head and neck squamous cell carcinoma (HNSCC). Despite advances in RT techniques to preserve dorsal nucleus of vagus (DVC) and area postrema (AP) and preventive antiemetic regimens, chemotherapy-induced nausea and vomiting (CINV) remains a main clinical complication. The aim of this prospective study was to investigate the effect of fosaprepitant in preventing CINV. A total of 24 patients with histologically proven locally advanced HNSCC candidates to CRT were enrolled. The incorporation of fosaprepitant reduced the incidence of moderate to severe nausea and vomiting. No correlation has been found between nausea and median dose to DVC and AP.

https://pubmed.ncbi.nlm.nih.gov/38351333/