

Dear Professor Skowronek,

Radioactivity was discovered by Becquerel in 1896. Two years later also in Paris, Maria Sklodowska-Curie, recently arrived from Warsaw, extracted radium from pitchblende ore. During the first decade of the 20<sup>th</sup> century, some treatments with radium were performed. In 1934, artificial radioactivity was discovered by Irène Curie and Frédéric Joliot, and that opened a new era for brachytherapy using artificial radionuclides. During the 1970's and the 1980's, the development of remote afterloading machines has allowed complete radioprotection. During the last decade of the 20<sup>th</sup> century and the first years of the new millennium, the situation evolved dramatically. The impressive progress of 3D imaging, the rapidly increasing speed and capacity of computers, and the sophisticated techniques developed for the modern afterloaders, again opened a new era.

The GEC ESTRO recently implemented an ambitious and wide-ranging project on Patterns of Care for Brachytherapy in Europe (PCBE), which aimed to provide detailed information on brachytherapy throughout the European area. The first step of the PCBE project was to set up a survey on brachytherapy facilities and activity. This survey clearly showed that the number of patients benefiting from a brachytherapy technique had significantly increased in every country of the European Union. This increase in number of patients implanted per year was mainly due to permanent seed and temporary implantation, which is now well accepted in management of localised prostate cancer.

Brachytherapy also plays a crucial role in the curative treatment of cervix cancer. CT and/or MRI compatible applicators allow a sectional image based approach with a better assessment of GTV and CTV compared to traditional approaches. Accurate and reproducible delineation of GTV and CTV, as well as critical organs, has a direct impact on treatment planning, especially it is possible to optimise the reference isodose by using DVH analysis.

As a result of randomised trials, approach combining conservative surgery and whole breast irradiation is now widely accepted as treatment of choice for the vast majority of breast cancers up to about 4 cm. When prognostic factors are favourable, it is now more and more frequently admitted that the postoperative irradiated volume could be limited to the sole quadrant in selected cases. First results published allow concluding that with 3D image guided interstitial brachytherapy local outcome does not seem compromised. Dose delivered to lungs and myocardium is furthermore considerably lowered. Randomised phase III trials have recently be started in Europe and in the United States, to test this modality as an alternative to whole breast external beam radiotherapy in good prognostic cases.

It is clear that brachytherapy can now challenge the very sophisticated techniques recently designed for external beam radiation therapy, IMRT, IGRT, protons, etc. The publication of a new journal, furthermore European, fully dedicated to modern brachtherapy, is very good news, and I sincerely congratulate you for achieving this exiting project. This journal will help to promote these vey promising new techniques of 3D Brachytherapy in and outside Europe and I am honoured to have been invited to join the Editorial Board, and wish a large success to the journal.

Yours sincerely

Professor Jean-Jacques Mazeron, MD, PhD  
President of The French Society for Radiation Oncology (SFRO)

Department of Radiation Oncology  
Groupe Hospitalier Pitié-Salpêtrière, AP-HP and University Paris VI  
47-83, Boulevard de l'Hôpital  
75651 Paris cedex 13, France  
Tel: 331 421 78 171  
Fax: 331 421 78 250  
E-mail: jean-jacques.mazeron@psl.aphp.fr