

## **BRACHYTHERAPY**

## 2022 GEC-ESTRO Workshop

## "Improving Brachytherapy Together"

1-2 December 2022 I Nice, France

## Report on gastro-intestinal

At the Groupe Européen de Curiethérapie-European SocieTy for Radiotherapy and Oncology (GEC-ESTRO) workshop, there were five presentations by the gastro-intestinal (GI)-GEC working group, one on liver brachytherapy and the other four on the Papillon technique.

The challenges of liver brachytherapy were presented, and the lack of a uniform method of treatment was discussed. Little data has been published regarding whether or not liver brachytherapy is beneficial. Brachytherapy is the most flexible technique for the treatment of liver malignancies, be it for one or multiple lesions. The main conclusion of this presentation was that because few patients are treated for liver cancer, more research should be performed through international collaboration. Surgery remains the gold standard for these patients. Participants discussed how such a project would be created and the cost of the database that would be required to save the data for comparison of brachytherapy with other treatment options.

Hepatic and biliary brachytherapy may be started at the centre where I work. Therefore it was interesting to gain insight into the benefits and challenges of the use of this treatment modality and the possibility that the release of further data will advance this field.

Only 12 centres throughout the world currently offer the Papillon technique. All the centres are in Europe: four are in the UK, four in France, one in Switzerland, two in The Netherlands and one in Denmark.

After Professor Jean-Pierre Gerard gave a brief introduction and history of the technique (which is also known as contact brachytherapy), the discussion moved to the three main areas of study regarding Papillon treatment:

- the organ preservation in rectal carcinoma (OPRA) trial;
- the use of short course (SCRT) or long course (LCRT) radiotherapy pre/post Papillon treatment; and
- the investigation of whether a complex intervention protocol decreases toxicity in patients who have undergone radiotherapy or surgery for colorectal cancer (the CITRuS trial).

The OPRA trial, which has just finished phase 3, and the comparative study of the use of SCRT with that of LCRT are both concerned with organ preservation in rectal cancer. Papillon as a boost or standalone treatment can be a viable alternative in cases in which patients are unfit for surgery (which is the standard to achieve for complete clinical response), or have other co-morbidities. Both studies have shown significant long-term complete clinical responses for rectal cancer patients, which indicates that Papillon may be beneficial to enable organ preservation in all patients, fit or unfit for surgery. More data will be released from the OPRA trial, but due to the initial findings, it is expected that numbers of referrals for Papillon treatment will increase and that there will be a demand for more centres to offer this service to patients.

The CITRuS trial is looking at how a more patient-centred approach can be used during treatment, and how early intervention might reduce the need for hospital admission and improve the patient experience through their cancer journey. Such an approach would use advances in personal technology in the form of smartphones and laptops to give the patients control of their own care. A healthcare application enables patients to comment on changes in their condition and to report any side effects as they appear. The appropriate healthcare professional is notified and a plan can be put in place promptly. The aim is that patients obtain real-time responses to their queries and action plans are drawn up to improve the patient experience during a very stressful time in their lives. This is currently being trialled on rectal cancer patients, but the future possibilities are endless; for instance, other patient groups may be added. The downsides are that patients may not use the resource or adhere to the plans provided for them, and that those without technical expertise or equipment will miss out.



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