



BRACHYTHERAPY

Report of the GEC-ESTRO GI working group

Since our last appearance in the brachytherapy corner, the 'rectal and anal working group' has become the 'GEC-ESTRO gastrointestinal (GI) working group'. This is to better reflect the coverage of the whole GI tract, particularly the growing liver brachytherapy practice and the renaissance of oesophageal brachytherapy.

The group has published recommendations for contact brachytherapy in rectal cancer (1) and is preparing recommendations for the use of high-dose-rate (HDR) brachytherapy in rectal cancer. The group is also focusing on the dosimetry of HDR rectal brachytherapy and has a contouring and dosimetry study ongoing to achieve better definitions.

The OPERA trial examining the role of a contact brachytherapy boost versus that of an external beam radiotherapy boost in early rectal cancer has reported initial findings (2). The trial has demonstrated a significant advantage to contact brachytherapy, particularly in those with tumours under 3cm at diagnosis. Full trial data, including patient-related outcomes (PROs), is due to be published soon.

The CITRuS trial has opened and is examining PROs using an electronic database. Future versions of the trial will incorporate interventions delivered electronically; this has been triggered by responses on the PRO questionnaires and is endeavouring to determine if delivery of early electronic interventions confers a benefit in health economics. The EXPRESS trial is in preparation and will further determine the role of contact brachytherapy for organ preservation in rectal cancer, particularly in conjunction with local surgery.

An international database for early rectal cancer treated by contact brachytherapy has been set up in Guildford. NICE (National Institute for Health and Care Excellence) guidance recommends its use for patients with early rectal cancer treated with contact brachytherapy in the UK. There is also the capability to enter data for more advanced rectal cancers treated by contact brachytherapy or HDR brachytherapy, and also data for all colorectal surgical patients for comparison. Please visit www.colorectaldatabase.com to sign up for use; this database was developed using charity funding and is free to use. It has already been used to report local outcomes for contact brachytherapy and also the outcomes of patients undergoing short-course radiotherapy and contact brachytherapy. The short course cohort has been reported from five hospitals in the UK and Sweden and initial results show favourable control rates, which is good news considering the older, frailer cohort of patients who particularly benefit from an organ preservation approach. Outcomes have been published for patients undergoing contact brachytherapy following local excision with a high risk of recurrence, and an excellent rate of local control has been demonstrated (3).

If you are interested in any of our activities and would like to join the group, please contact:
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We are particularly keen to grow the input for GI brachytherapy for disease sites other than the rectum, so please step forward and get involved.



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References:

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2. Gerard JP, Barbet NN, Pacé-Loscos T, et al. Contact x-ray brachytherapy (Papillon) in addition to chemoradiotherapy to improve organ preservation in early cT2-T3 rectal adenocarcinoma: The 3-year results of OPERA randomised trial (NCT02505750). *J Clin Oncol*. 2022;40.
3. Dhadda AS, Sun Myint A, Thamphya B, Hunter I, Hershman M, Gerard J-P. A multi-centre analysis of adjuvant contact X-Ray brachytherapy (CXB) in rectal cancer patients treated with local excision - preliminary results of the CONTEM1 study. *Radiother and Oncol*. 2021;162:195-201.

