Short course pre-operative patients
Proposed pathway for Manchester Cancer Colorectal Pathway

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Background/rationale:
A short course of pre-operative radiotherapy (SCPRT) should be considered for operable rectal cancers with the primary aim of reducing the risk of local recurrence\textsuperscript{1-3}.

Inclusion criteria:
A short course of pre-operative radiotherapy (SCPRT) should be considered for T3 cancers that do not threaten the CRM and also considered for some T2 tumours in the mid and low rectum on an individual basis \textsuperscript{1-3}. Potentially involved lymph nodes or local blood vessels should also not threaten the CRM. It is appropriate to consider a SCPRT for high “bulky” T3 tumours that do not threaten the CRM. T1 and T4 tumours should not normally receive a SCPRT unless they are eligible for a clinical trial or if the MDT feels that there is a particular reason to recommend a SCRT.

Dose, regime and time to surgery:
The standard SCPRT dose and regime within the Manchester Cancer area is 20Gy in 4 fractions (\#)\textsuperscript{4}. Although this differs from the national regime and dose of 25Gy in 5\#\textsuperscript{5}, there is published data to support this current protocol. This data demonstrates that this treatment regimen has a local recurrence rate comparable with the rest of the UK; however there is an improvement in patient’s quality of life (QoL) due to a reduction in late radiation toxicity\textsuperscript{6}. However, if the MDT feels that 25Gy in 5\# is appropriate for a particular patient then this is also acceptable.

SCPRT acute toxicity commonly occurs at 2 weeks from the commencement of treatment. These cellular level toxicities include mucosal cell loss, acute inflammation, eosinophilic crypt abscesses, endothelial swelling in the arterioles induced by SCPRT\textsuperscript{6}. Therefore, it is recommended that surgery is \textbf{undertaken within 12 days from the commencement of SCPRT} (i.e. RT one week and surgery the following week).
Current ‘general’ SCPRT pathway:

- Discussed in local MDT and referred to clinical oncologist with provisional date for surgery (4-5 weeks time)
- Seen in outpatient clinic and radiotherapy booking form completed

Approx. 2 days later
- SCPRT booked and email sent to all surgical teams. Surgical team checks that radiotherapy dates fit with surgical date. If surgery is unable to be completed the week following radiotherapy – surgical team to request new SCPRT dates to suit surgical date.

- Surgery date recorded within radiotherapy system

5 days later
- Patient attends for radiotherapy planning scan

Radiotherapy treatment planned

7 days later
- Surgical date confirmed with patient and patient starts SCPRT

Within 12 days from start of radiotherapy
- Patient undergoes surgery

Please note: if the surgical team are trying to ‘forward plan’ their workload, commonly patients take 3 full weeks from MDT discussion to the start of SCPRT (however this is only an approximation and local practices may differ).

The Christie NHS Foundation Trust recognises that there are exceptional circumstances where patients may have to be fast-tracked through this process. It would be greatly appreciated if the surgical team could inform the referral clinical oncologist and colorectal specialist radiographer as soon as possible if a fast-track is required. This will enable the team to ‘forward plan’ their workload and reduce the potential risk of error.

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References:


