

Local recurrence of colorectal cancer

Bespoke care for the informed patient in a field with lots of unknowns and little high quality evidence

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Levels of evidence and grades of recommendation

Table I

Levels of evidence and grades of recommendation according to the Scottish Intercollegiate Guidelines Network

Levels of evidence

1++	High-quality meta-analyses, systematic reviews of RCTs, or RCTs with very low risk of bias.
1+	Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias.
1-	Meta-analyses, systematic reviews of clinical trials, or clinical trials with high risk of bias.
2++	High-quality systematic reviews of cohort or case-control studies Cohort or case-control studies with very low risk of bias and a high probability of establishing a causal relationship.
2+	Well-conducted cohort or case-control studies with a low risk of bias and a moderate probability of establishing a causal relationship.
2-	Cohort or case-control studies with a high risk of bias and a significant risk that the relationship is not causal.
3	Non-analytical studies, such as case reports, case series or descriptive studies.
4	Expert opinion.

Grades of recommendation

A	At least one meta-analysis, systematic review, or RCT, rated as 1++ and directly applicable to the guideline's target population; or a body of evidence composed of studies rated as 1+ and with overall consistency among them.
B	A body of evidence composed of studies rated as 2++, directly applicable to the guideline's target population and demonstrating overall consistency among them; or evidence extrapolated from studies rated as 1++ or 1+.
C	A body of evidence composed of studies rated as 2+ directly applicable to the guideline's target population and demonstrating overall consistency among them; or evidence extrapolated from studies rated as 2++.
D	Level of evidence of 3 or 4; or evidence extrapolated from studies rated as 2+.

Levels of evidence and grades of recommendation

- No randomised trials or high quality evidence to guide treatment
- Anastomotic leak is associated with local recurrence (OR=2) 1-, B *(refs 1,2)*
- Biopsy for confirmation of diagnosis 2+, C *(refs 3,4)*
- If biopsy not possible, serial enlargement and positive CEA/PET/sMDT opinion 2-, D *(refs 3,4)*
- PET has utility in staging 3, D *(refs 3,4)*
- Referral of patients to specialist exenterative units 4, D *(refs 3,4)*
- MRI is optimum imaging modality for determining anatomy of disease in pelvis 2-, C *(refs 3,4)*
- Optimum treatment is by multimodality treatment 2+, C *(refs 3,4)*
- Chemoradiotherapy if Radiotherapy naïve 2+, C *(refs 3,4)*
- Consider reirradiation if previous Radiotherapy 3, D *(refs 3,4)*
- Radical surgical resection aiming for R0 if fit and appropriately informed 2+, B/C *(refs 3,4)*
- Surgery based on pre-treatment imaging 4, D *(refs 3,4)*
- Intraoperative radiotherapy if margins predicted to be close/involved 2-, C *(refs 3,4)*
- Close collaboration between surgeon and pathologist for evaluation of margins 4, D *(refs 3,4)*

Key points

- Management of locally recurrent CRC is an MTE - Massive team endeavour
 - Referring team and MDT; receiving team and MDT; CNSs; Medical and clinical oncology; Palliative care; Radiology; IR; Pathology; Anaesthetics; different surgical specialties; medical physics and radiographers
- MTE - also equates to a communication challenges.
- Effective and regular communication is helpful with patients; between units; and between teams
- No clear single model or pathway: Tailored to individual patients; anatomy (and classification) of disease; and circumstances.
- General oversight by specialist MDT where possible
- Early review and discussion between the planned ultimate surgical team and patients and their family is encouraged

Key points

- Important knowledge gaps:
 - Role of reirradiation; intraoperative brachytherapy; or electron beam radiotherapy
 - How to avoid radical surgery in those with occult micrometastases – critical need for validated biomarkers with clinical utility
 - Optimum follow up approach
 - Quality of life and Health economics in the setting of a clinical trial
- Other areas for improvement:
 - Standardising radiological classification systems
 - Standardising pathological assessment

References

1. Mirnezami A, Mirnezami R, Chandrakumaran K, Sasapu K, Sagar P, Finan P. Increased local recurrence and reduced survival from colorectal cancer following anastomotic leak: systematic review and meta-analysis. *Ann Surg*. 2011 May;253(5):890-9.
2. Lu ZR, Rajendran N, Lynch AC, Heriot AG, Warriar SK. Anastomotic Leaks After Restorative Resections for Rectal Cancer Compromise Cancer Outcomes and Survival. *Dis Colon Rectum*. 2016 Mar;59(3):236-44.
3. Beyond TME Collaborative. Consensus statement on the multidisciplinary management of patients with recurrent and primary rectal cancer beyond total mesorectal excision planes. *Br J Surg*. 2013 Jul;100(8):1009-14.
4. Beyond TME Collaborative. Consensus statement on the multidisciplinary management of patients with recurrent and primary rectal cancer beyond total mesorectal excision planes. *Br J Surg*. 2013 Jul;100(8):E1-33.