Survival outcomes in patients with complete response after neoadjuvant chemoradiotherapy for locally advance rectal cancer

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Background:

The standard of care for locally advance rectal cancer is neo-adjuvant chemoradiotherapy (NCRT) followed by interval surgery. Patients with clinical complete response (cCR) presents a dilemma for the clinical teams as there are no current guidelines for the management of these patients. In this study, we present the long-terms outcomes of patients who opted a 'wait and see approach' and those who underwent surgery and were found to have a pathological complete response (pCR). See Figure 1.

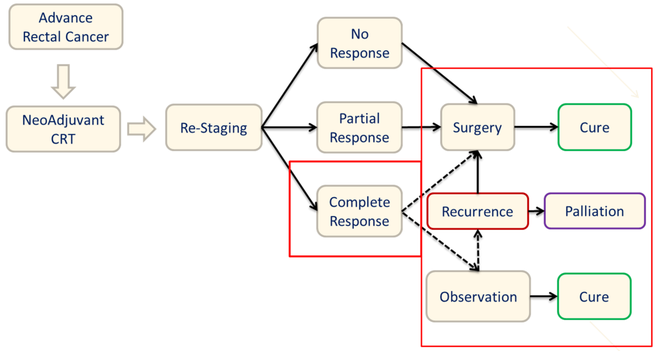


Figure 1: Flowchart displaying possible scenarios for managing LARC dependant on the response to NCRT

Aims :

Primary: disease-free and overall survival in patients who had complete response after neoadjuvant chemoradiotherapy for locally advance rectal cancer

Secondary: establish the median period of recurrence and the rates of salvage surgery in patients with clinical complete response.

Methods:

Type: Retrospective cohort study

Period: August 2008 – August 2020

Institution: Darent Valley Hospital, Dartford, United Kingdom

Inclusion Criteria:

- Complete clinical response on post-NCRT staging without proceeding to surgical resection in the first instance ('wait and see' approach)
- Complete pathological response on final histopathological specimen after standard surgery

Data collected:

- Demographic details
- Tumour characteristics (Type, Staging)
- Pre-/ post NCRT/ (NCRT regime)
- Post-operative histopathological staging,
- Date and type of recurrence
- Mortality.

'Wait and see' Surveillance Protocol:

Year	CEA	DRE	Endoscopy	MRI	CT CAP
1	4x	4x	4x	4x	2x
2	4x	2x	2x	2x	1x
3	4x	2x	2x	2x	1x
4	2x	2x	2x	2x	1x
5	2x	2x	2x	2x	1x

Results:

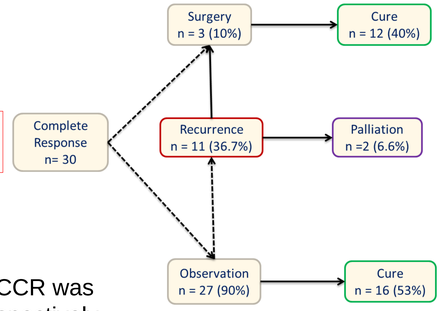
Sample Size = 30 | **Median Age** = 67 (IQR 60-75) | **M:F** = 3:2
Tumour Characteristics: D-AV = 5cm (IQR 4 – 10cm) | Tumour Length = 4.7 cm (IQR = 3.5 – 7cm)
Histology: Mod Diff = 90%; Poorly Diff = 6.7%; Unknown = 3.3%
Pre-Rx Stage (T2=27.6%; T3=65.5%; T=46.9%;N0=27.6; N1 = 20.7%; N2 = 51.7%)| CRM (+ve = 66.7%; -ve = 33.3%)

Clinical Complete response
Wait and see approach = 27 (90%)

- Recurrence = 11 (36.7%)
- Local = 9 (30%)
- Distant = 2 (6.7%)

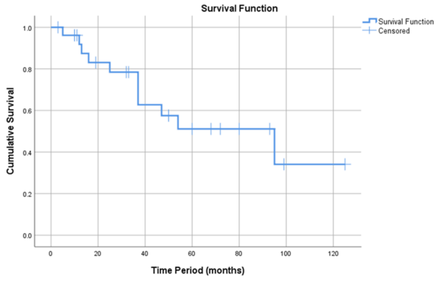
Median time period 9 months (IQR 3-15)

Salvage surgery = 8 (29.6%)

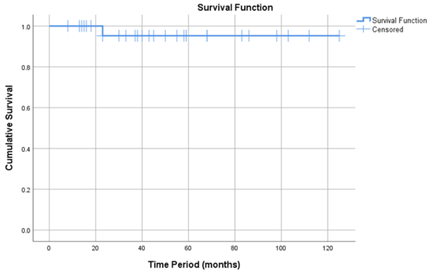


Participants with cCR
The 5-year DFS and OS for participants with CCR was 51.1% (SE ± 11.4%) and 95.2% (SE ±4.6), respectively

Disease Free Survival



Overall Survival



Conclusions:

- A complete response confers a good prognosis for the patients
- Patients with clinical complete response can be managed without surgery under a stringent follow-up protocol to detect early recurrence