

Locally Advanced Colon Cancer- A Single Centre Study

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OBJECTIVE

Locally advanced colon cancer (LACC) present surgical difficulty since the tumors spread to nearby organs and structures. The surgical strategy should involve a multivisceral resection with or without neoadjuvant downstaging in order to achieve a R0 resection. The prognosis for LACC is poor. LACC is increasingly being treated with neoadjuvant chemotherapy (NAC). Aim of this study is to determine overall survival, disease free survival, recurrence of disease in upfront surgery patients and paving way for neoadjuvant therapy in LACC.

BACKGROUND

(LACC), which accounts for roughly 36% colon cancers.(1) Stage IIB(T4aN0M0) and stage IIC(T4bN0M0) had 5-year survival rates of 60.6% and 45.7%, respectively. Patients with node-positive T4 (stage IIIC) disease have a 5-year survival rate of less than 40%.(2)

When compared to non-multivisceral resections, the 30-day death rate is 3.6% and the post-operative complication rate is around 11.5% for multivisceral resections.(3)

Favorable prognostic factors include smaller tumor size, fewer affected organs, negative resection margins and lack of lymph node involvement (or a small number of positive ones).(4)

METHODS

Retrospective study including all patients with Locally advanced colon cancer(Stage IIB to Stage IIIC- AJCC 8th ed.) who underwent surgery in 3 years duration (2018-2020) at Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore. Patients who had metastatic or recurrent cancer, incomplete clinical or pathological data and patients with contraindications for surgical procedure were excluded from analysis.

SPSS v.26 used for data analysis.

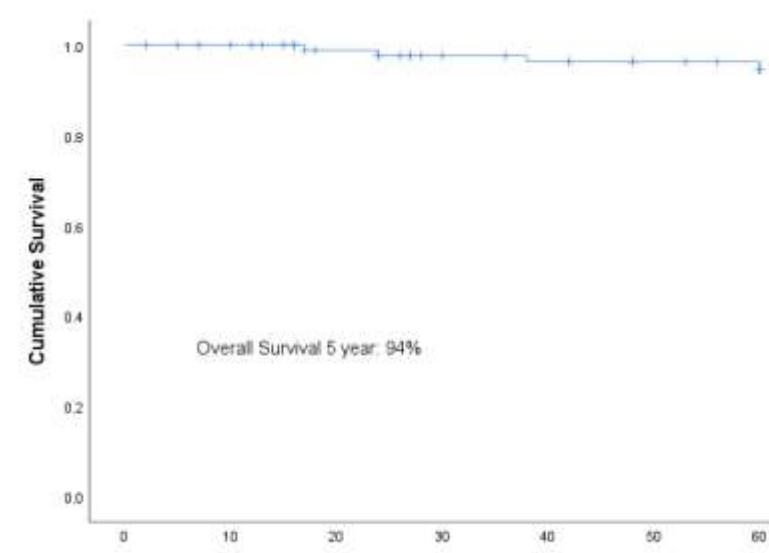
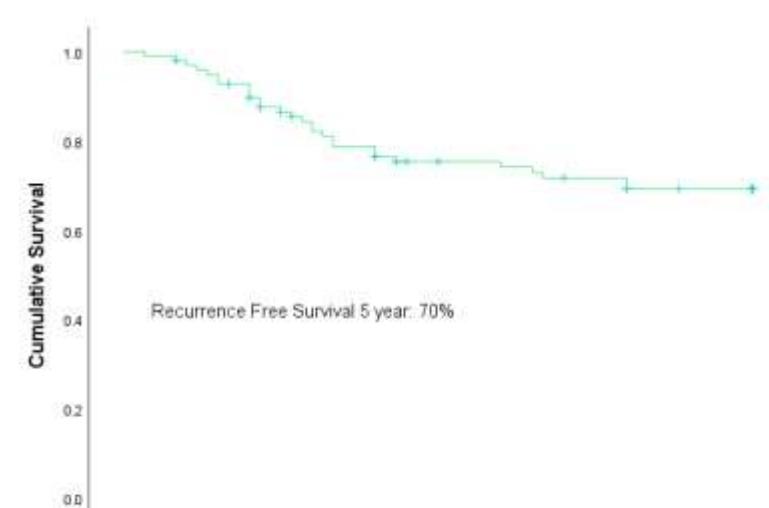
RESULTS

74(75.5%) male and 24(24.5%) were female. Most commonly encountered pathological stages were IIB(10.2%),IIIB 56(57.1%) and IIIC 24(24.4%). Only 4(4.1%) patients had neoadjuvant chemotherapy. Mostly patients went for upfront surgery 94(95.9%). 1(1.0%) patient had macroscopically positive resection margins. 92(93.9%) patients had more than 12 lymph nodes removed for adequate staging. 5(5.0%) patients had post operative complications. 10(10.2%) patients did not receive adjuvant chemotherapy while 88(89.8%) received adjuvant chemotherapy. 70(71.4%) patients had no recurrence, while 28(28.6%) had recurrence either visceral, anastomotic site, omentoperitoneal or nodal. Stage II B/C survival ranges from 1.5 years to 5 years with mean survival of 3 years, while Stage III showed survival ranging from 1 year to 5 years with mean survival of 3.5 years. Patients who received neoadjuvant chemotherapy showed 5 year survival benefit.

Pathological Stage (Histopathology)	Total No of Lymph nodes				Resection Margins Status		
	Frequency	Percent	LN		Frequency	Percent	
Valid			LN Removed	Percent	Involved	Percent	
Stage I	1	1.0	>12	92	93.9	7	7.1
Stage IIB	10	10.2	1-3	1	1.0	38	38.8
Stage IIC	3	3.0	4-7	1	1.0	18	18.4
Stage IIIA	4	4.0	8-12	3	3.1	9	9.2
Stage IIIB	56	57.1	None	1	1.0	26	26.5
Stage IIIC	24	24.4	Total	98	100.0	98	100.0
Total	98	100.0					

Adjuvant Chemotherapy	
	Frequency
CAPOX	74
FOLFOX	4
Capecitabine	6
CAPOX+FOLFOX/FOLFIRI	4
No	10
Total	98

Recurrence		
	Frequency	Percent
Yes	28	28.6
No	70	71.4
Total	98	100.0



CONCLUSION

The use of NAC as an alternate therapy option is limited to cT4 or colon cancer with a significant nodal burden, according to current clinical guidelines. Upfront surgery in LACC is beneficial while neoadjuvant chemotherapy can be considered in selective cases where there is adjacent organ involvement or extensive nodal burden.

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