

INTRODUCTION

- Right-sided colon cancer (RSCC, superior mesenteric artery territory) and left-sided colon cancer (LSCC, inferior mesenteric artery territory) differ in embryology, molecular profile and presentation.
- Western cohorts and meta-analyses report worse survival for right-sided tumours.
- Pakistani patients present 15–20 years younger, and no Pakistani survival data by sidedness exist; an earlier SKMCH series of 200 cases compared pathology only.

OBJECTIVES

To compare 5-year overall survival (OS) and recurrence-free survival (RFS) between right- and left-sided colon cancer.

METHODOLOGY

- STUDY DESIGN:** Retrospective cohort, Surgical Oncology, SKMCH&RC Lahore
- STUDY PERIOD:** Patients operated 2010–2022
- INCLUSION:** Age ≥18 y, colon adenocarcinoma, any stage, completed 5-year OS and RFS follow-up
- GROUPS:** Right = caecum to transverse colon; left = splenic flexure to sigmoid (rectum excluded)
- OUTCOMES:** OS (death from any cause); RFS (recurrence or death) in patients rendered disease-free; censored at 60 months
- STATISTICAL ANALYSIS:** Kaplan–Meier with log-rank test; Cox regression adjusted for age, sex and stage; χ^2 , Welch t or Mann–Whitney U tests

PATIENTS

148

patients (OS + RFS)

➔

84

right-sided

64

left-sided

RFS analysed in 129 (69 right, 60 left); 19 with persistent disease (never disease-free) excluded.

Baseline characteristic	Right (n = 84)	Left (n = 64)	P
Age, y, mean ± SD	44.7 ± 12.7	45.3 ± 15.0	.78
Male	62 (73.8)	46 (71.9)	.94
Stage I	6 (7.2)	5 (7.8)	.53
Stage II	42 (50.6)	25 (39.1)	
Stage III	32 (38.6)	30 (46.9)	
Stage IV	3 (3.6)	4 (6.2)	
Poorly differentiated	11 (13.3)	5 (8.5)	.54
Lymphovascular invasion	2 (2.7)	7 (13.2)	.03
Laparoscopic	65 (80.2)	48 (77.4)	.84
Emergency / urgent	9 (10.7)	12 (18.8)	.25
Adjuvant chemotherapy	48 (58.5)	47 (74.6)	.07
Nodes harvested, median (IQR)	18 (15–29)	19 (16–27)	.89

n (%) unless stated; percentages of patients with data recorded.

RESULTS

148

patients with complete 5-year follow-up

87.5%

5-year OS
95% CI 80.9–92.0

78.5%

5-year RFS (n = 129)
95% CI 70.3–84.7

– Right-sided

– Left-sided

+ censored

Overall survival, right (n = 84) vs left (n = 64)

At risk	0	12	24	36	48	60
Right	84	80	75	73	73	72
Left	64	62	58	54	52	50

5-year OS: right 90.3% (81.5–95.0) vs left 84.0% (72.2–91.0); 8 vs 10 deaths; log-rank P = .29

Recurrence-free survival, right (n = 69) vs left (n = 60)

5-year RFS: right 78.8% (66.7–86.8) vs left 78.1% (65.3–86.7); 14 vs 13 events; log-rank P = .79

Cox regression, adjusted hazard ratio (95% CI)

Deaths within 5 years: 8/84 (9.5%) right vs 10/64 (15.6%) left, P = .38

Recurrence: 13/84 (15.5%) vs 14/64 (21.9%), P = .43

Persistent disease: 15/84 (17.9%) vs 4/64 (6.2%), P = .047 (Fisher)

CONCLUSION

In 148 patients with complete 5-year follow-up, tumour sidedness was not associated with overall or recurrence-free survival, before or after adjustment for age, sex and stage. Stage IV disease predicted both death and recurrence, and older age predicted recurrence. Right-sided tumours were more often left with persistent disease. Analysis of the full cohort is under way.