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Epidemiology of Rectal Cancer Patients in the Kingdom of Bahrain: A Retrospective Cohort Study

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Study Design

- Retrospective cohort
- Completed at a single major tertiary referral centre (KHUH)
- January 2019 to December 2022
- 184 patients included
- Inclusion criteria:
 - Diagnosis of primary or second primary rectal cancer between Jan 2019 to Dec 2022 and was discussed at the National Tumour Board Meeting.
- Exclusion criteria:
 - cancer of other origins/metastasized to the rectum
 - colon or anal cancer
 - diagnosed before 2018 or after December 2022

Primary outcomes:

1. Demographics: gender, BMI, family history
2. Diagnostic/Disease presentation:
 1. Symptomatic
 2. screening with a fecal immunochemical test
 3. incidental findings on radiological scans / scopes
3. Tumour characteristics:
 1. Site of tumour (including epicenter of tumour)
 2. Staging at the time of diagnosis
 3. Staging at interval follow-up time periods.
 4. If metastatic, site of mets.
4. Histology
5. Grading
6. Follow-up: 30 days, 90 days, 180 days, 1 year, and 5 year.



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Results

Outcomes:	Result:
Nationality:	85.9%: Bahraini nationals
Gender:	Males: 57.6% Females: 42.4%
Age:	mean age was 59.1 ± 11.4 years ≤60 years: 51.1%
Family History:	23.4%
Presentation	Symptomatic: 91.8% Screening campaign: 3.8% Incidental colonoscopies: 4.8%
Stage at time of diagnosis:	Stage I : 8.2% Stage II: 6.0% Stage III: 65.8% Stage IV diagnosis: 19.6%
Tumour histopathology:	Adenocarcinoma: 97.8%
Overall 1-year survival:	Males: 95.3% Females: 93.6%

Table 1: BMI classifications of rectal cancer patients in the Kingdom of Bahrain

Average BMI [m ± SD (min-max)]	27.4 ± 6.1 (13.0–50.7)
BMI scale (<i>n</i> = 168) (<i>n</i> ,%)	
Underweight	9, 4.9
Normal	52, 28.3
Overweight	58, 31.5
Obese	49, 26.6

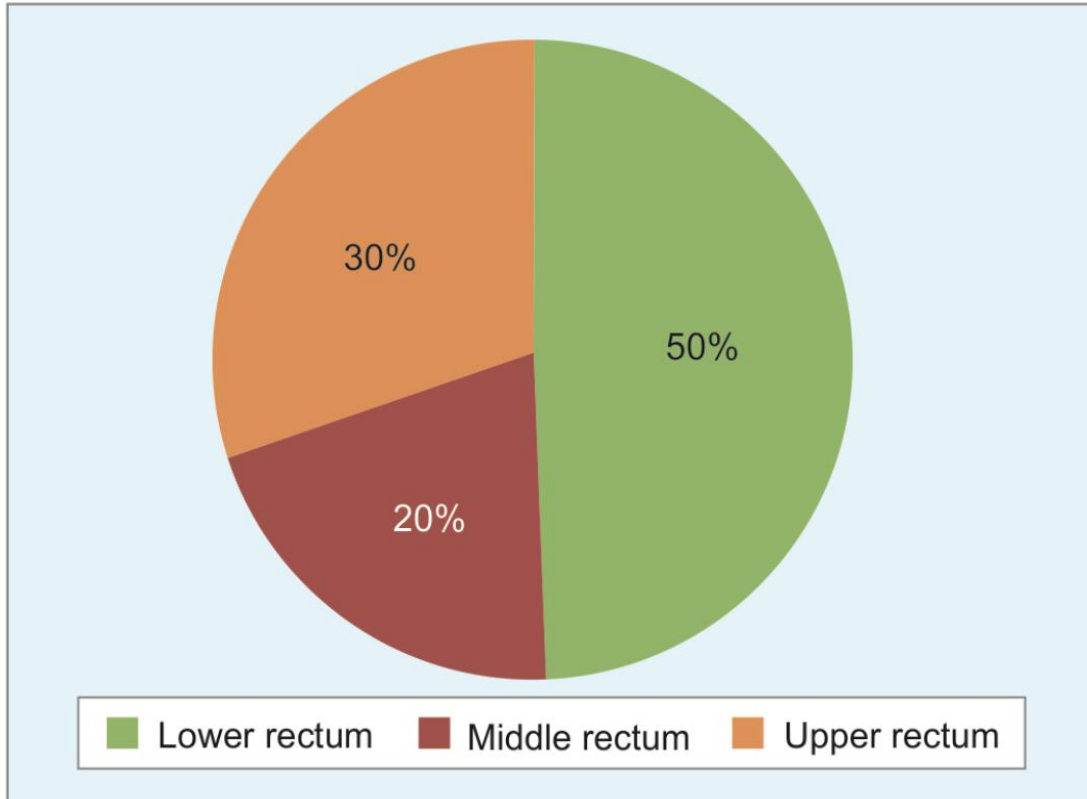
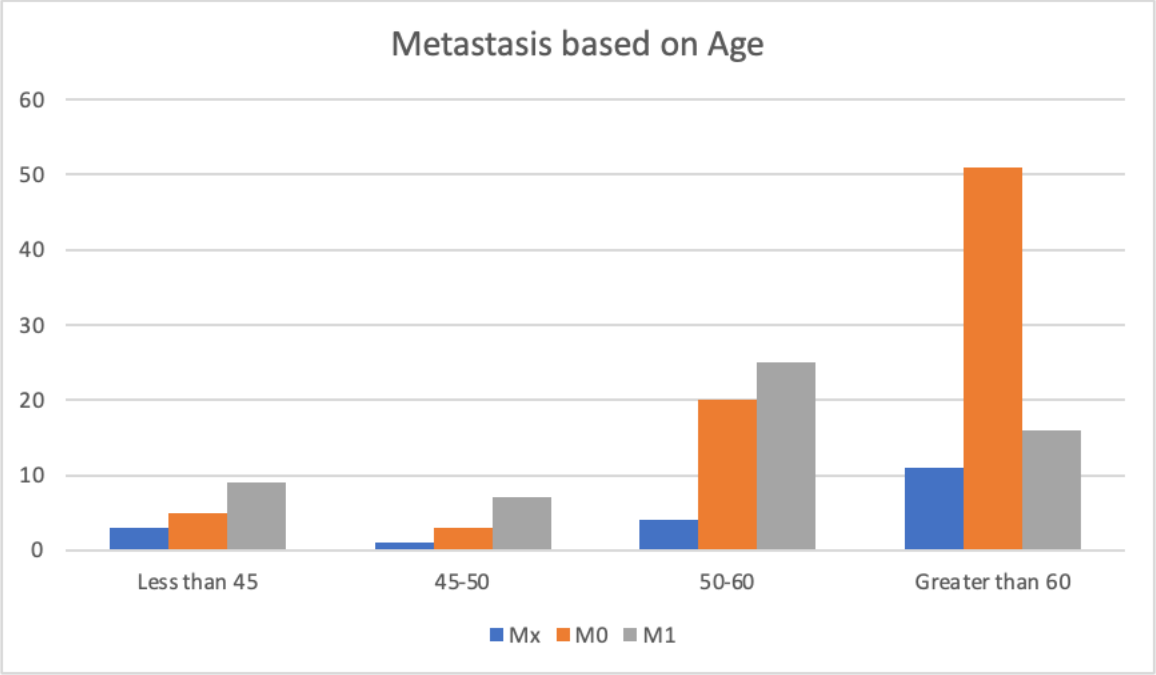


Fig. 3: Frequency of the site of tumor at the time of diagnosis



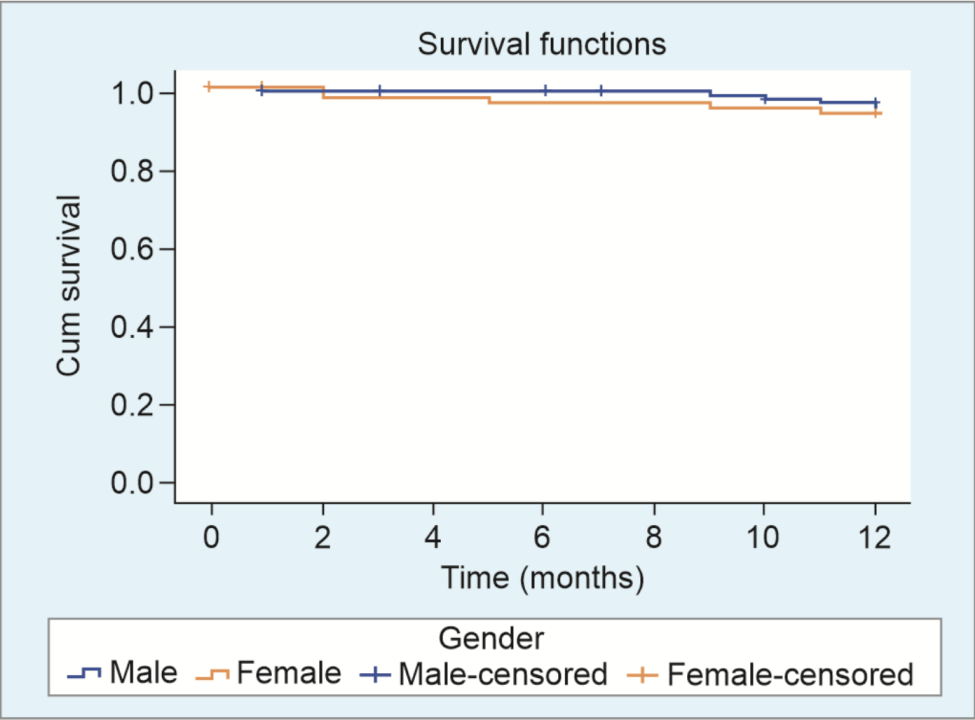


Fig. 5: Survival analysis by gender

Table 3: Patient follow-up adherence

Time point (months)	No. of patients	# of cases lost by cause		
		New deaths	Lost to follow-up	Time not reached
1	184 (100%)	–	–	–
3	173 (94.0%)	3	8	–
6	168 (91.3%)	–	5	–
12	159 (86.4%)	7	2	–
36	49 (26.6%)	28	14	68

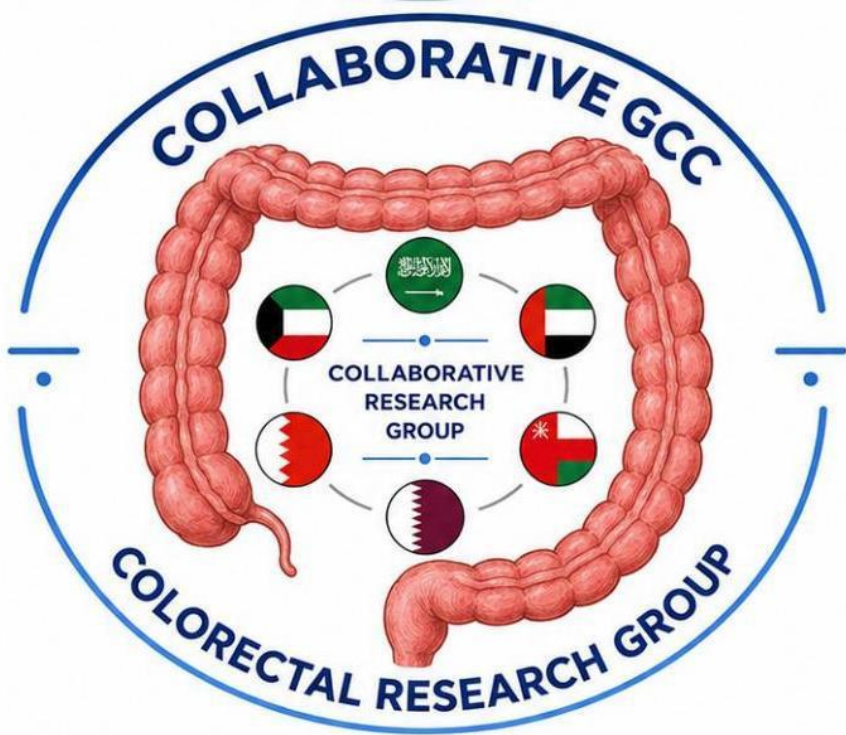


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Conclusion

Take home message

- Majority diagnosed at Stage III
- Half of patients are ≤ 60 years
- Lower rectum most common tumour location
- Symptom-based diagnosis remains predominant in Bahrain
- Findings support strengthening a national screening programme and earlier detection strategies in Bahrain.
- Further analysis and studies to investigate our data found on comorbidities and the link to rectal cancer in Bahrain



Thank you
Any Questions?