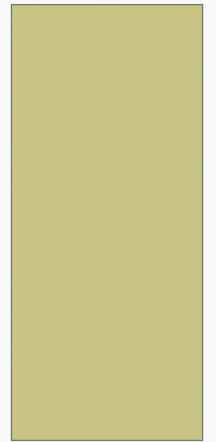


BOWEL FUNCTION AS PER TREATMENT MODALITY

TÉ VUONG
JEWISH GENERAL HOSPITAL,
MCGILL UNIVERSITY.



TREATMENT OPTIONS FOR LOWER GI TUMORS

- TME surgery: APR vs LAR
- Pre-operative CT-RT +TME
- HDRBT+TME (McGill University)
- CT-RT alone (anal canal cancer)and observation
- EBRT+/-CT and HDRBT (radical) and observation

RADIATION REGIMENS

- Pre operative CT-RT: 50 Gy in 25 fractions
- Pre-operative HDRBT: 26 Gy in 4 fractions
- Chemotherapy and external beam radiation therapy: 54 Gy in 30 fractions
- External beam RT and HDRBT boost: 40 Gy in 16 fractions + HDRBT boost : 30 Gy in 3 fractions to the residual tumor bed

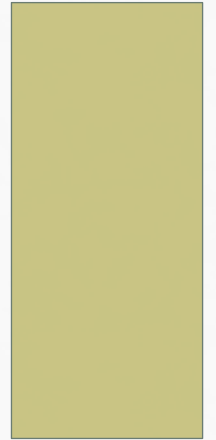
BOWEL DYSFUNCTION

AFTER SPS:

THE LOW ANTERIOR RESECTION SYNDROME (LARS)

- Frequency, Urgency
- Clustering, emptying difficulties
- Stool incontinence
- Gas incontinence

MATERIAL AND METHODS



MATERIAL AND METHODS

- Patients with rectal cancer or anal canal cancer treated between 2013 - 2015 were recruited in this study during our clinics.
- IRB approved signed consent and self administered questionnaire.
- Patients with LAR with ileostomy closure for at least 3 months.
- Patients with anal canal and rectal cancer treated with External beam Radiation and HDRBT but no evidence of local recurrence.

LARS SCORING

Do you ever have occasions when you cannot control your flatus (wind)?

- | | |
|---|---|
| <input type="checkbox"/> No, never | 0 |
| <input type="checkbox"/> Yes, less than once per week | 4 |
| <input type="checkbox"/> Yes, at least once per week | 7 |

Do you ever have any accidental leakage of liquid stool?

- | | |
|---|---|
| <input type="checkbox"/> No, never | 0 |
| <input type="checkbox"/> Yes, less than once per week | 3 |
| <input type="checkbox"/> Yes, at least once per week | 3 |

How often do you open your bowels?

- | | |
|---|---|
| <input type="checkbox"/> More than 7 times per day (24 hours) | 4 |
| <input type="checkbox"/> 4-7 times per day (24 hours) | 2 |
| <input type="checkbox"/> 1-3 times per day (24 hours) | 0 |
| <input type="checkbox"/> Less than once per day (24 hours) | 5 |

Do you ever have to open your bowels again within one hour of the last bowel opening?

- | | |
|---|----|
| <input type="checkbox"/> No, never | 0 |
| <input type="checkbox"/> Yes, less than once per week | 9 |
| <input type="checkbox"/> Yes, at least once per week | 11 |

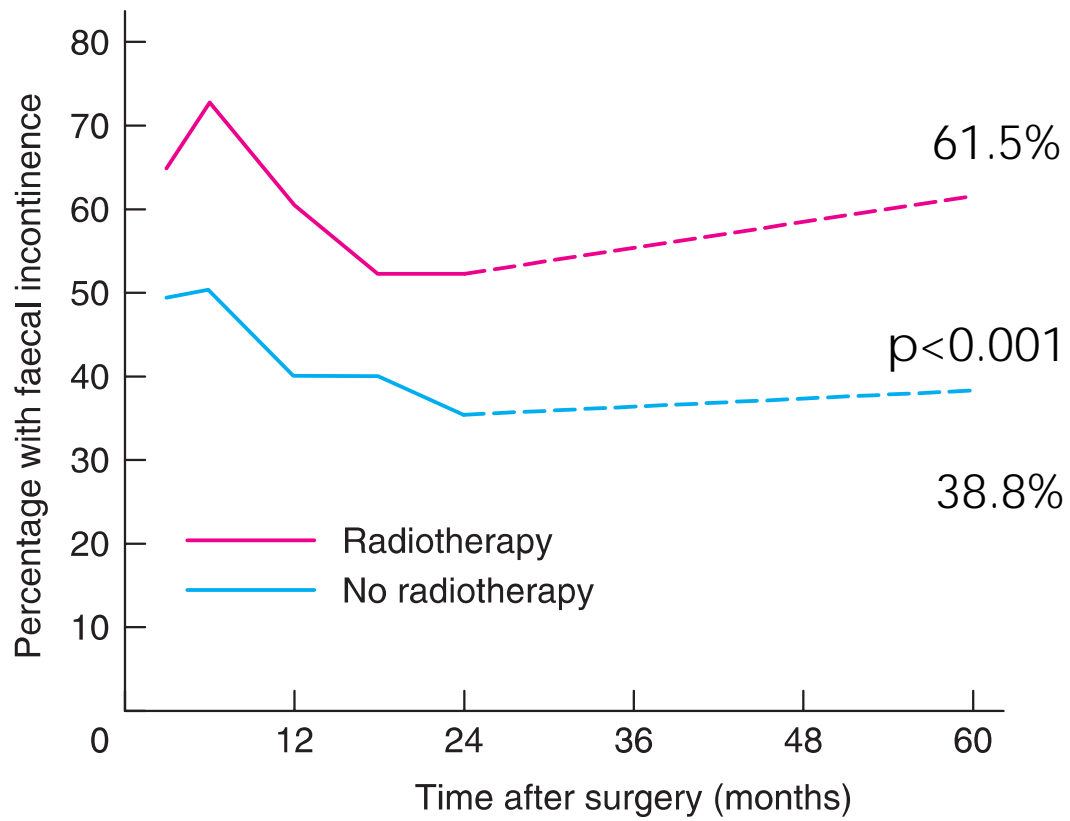
Do you ever have such a strong urge to open your bowels that you have to rush to the toilet?

- | | |
|---|----|
| <input type="checkbox"/> No, never | 0 |
| <input type="checkbox"/> Yes, less than once per week | 11 |
| <input type="checkbox"/> Yes, at least once per week | 16 |

Total Score: _____

Interpretation:

- | | |
|--------|------------|
| 0-20: | No LARS |
| 21-29: | Minor LARS |
| 30-42: | Major LARS |

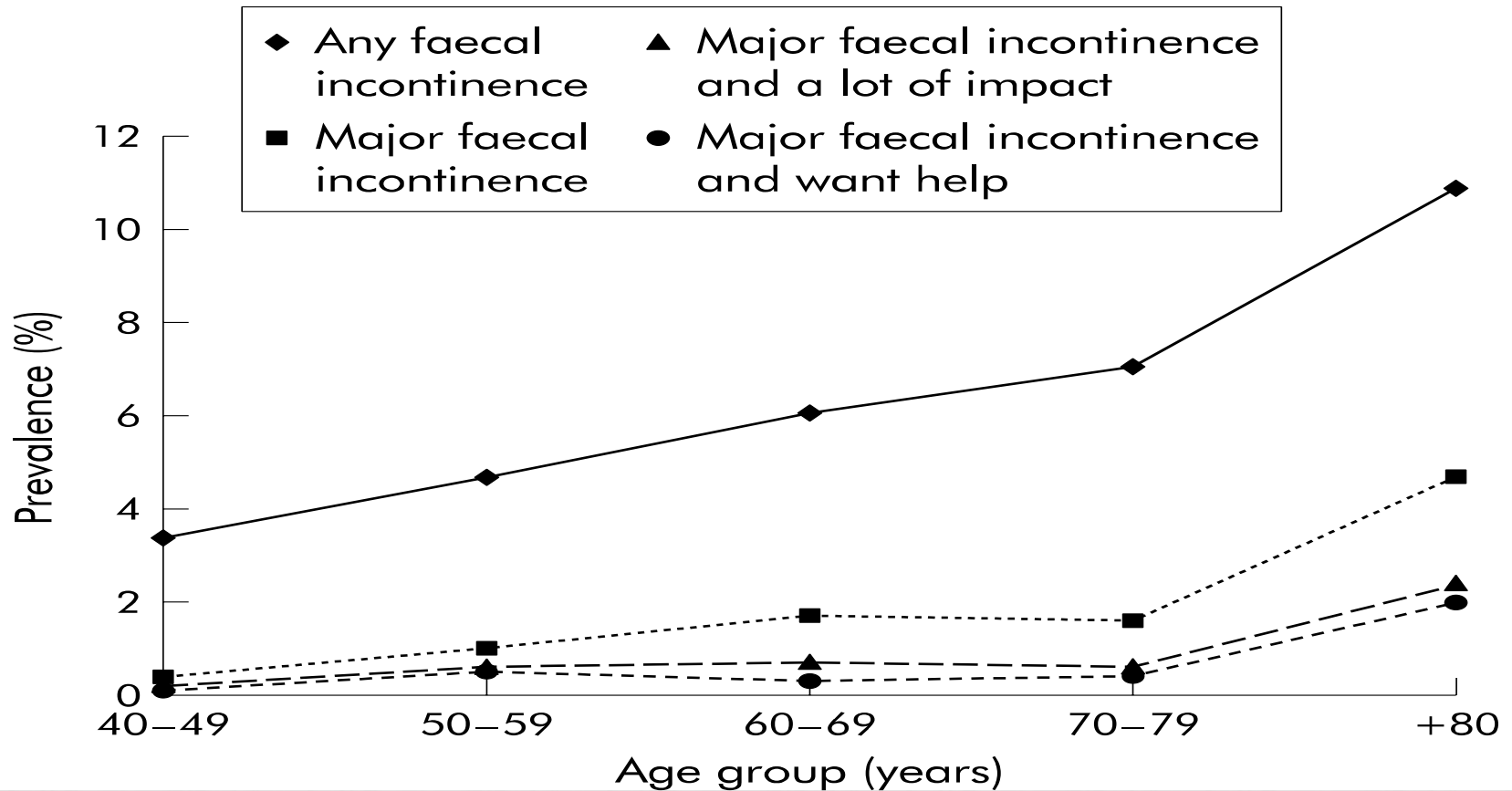


RESULTS

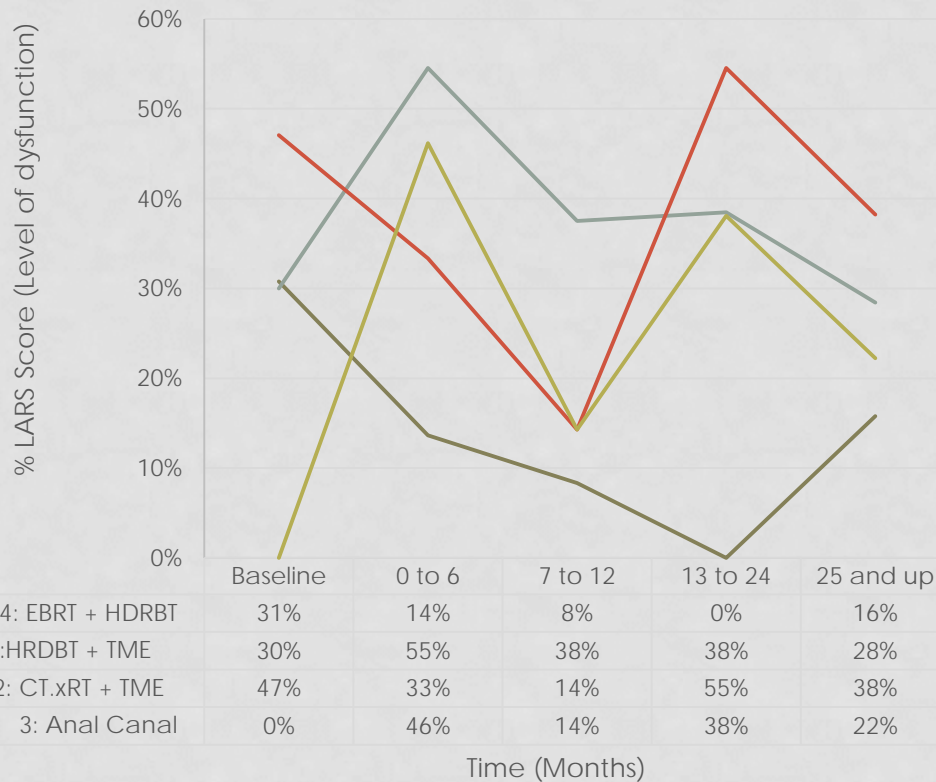
	CT-RT-TME	HDRBT-TME	CT-RT (anal canal)	EBRT-HDRBT (Radical RT)
# patients	78	209	92	77
Median age	59 (38-78)	60 (36-85)	57 (39-91)	80(52-89)
male	62%	70%	21 %	65%
female	38%	30 %	79%	35%
Lower 1/3	47%	51%	100%	41%
Middle 1/3	49%	44%		55%
Upper 1/3	4%	5%		4%

BOWEL FUNCTION AS A FUNCTION OF AGE

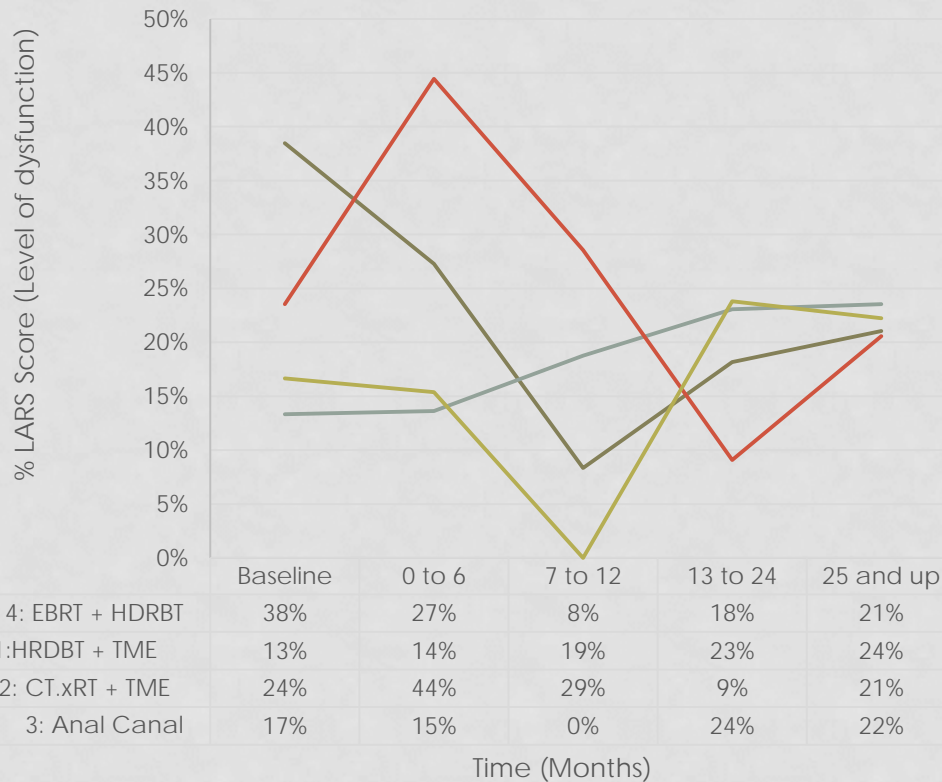
NORMAL POPULATION : 10 116 (UK)



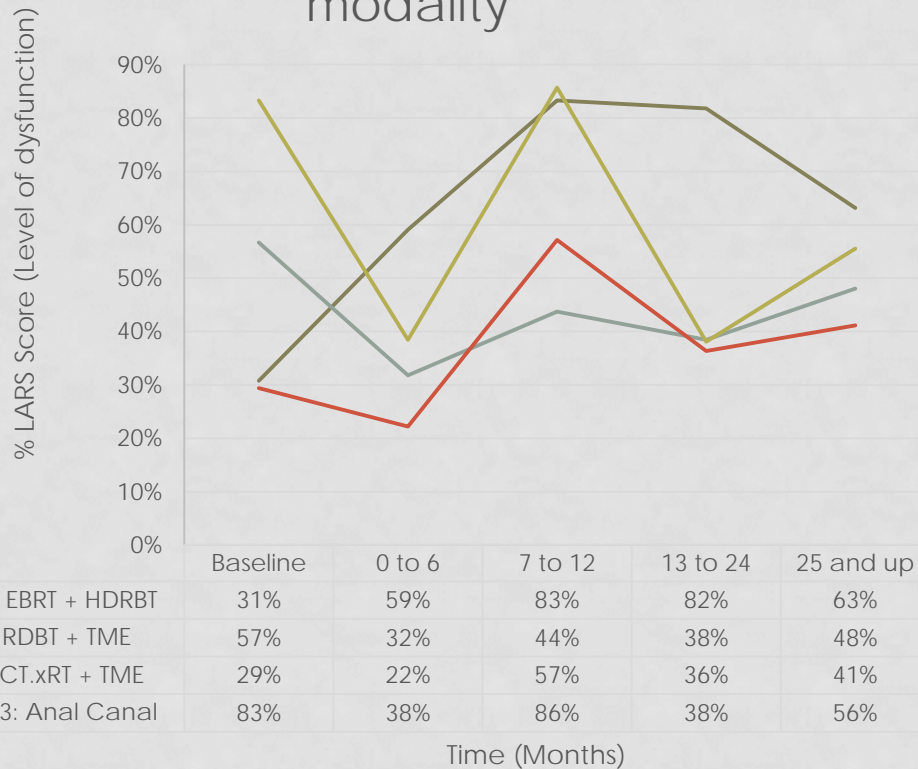
Percentage of Major LARS patients per treatment modality



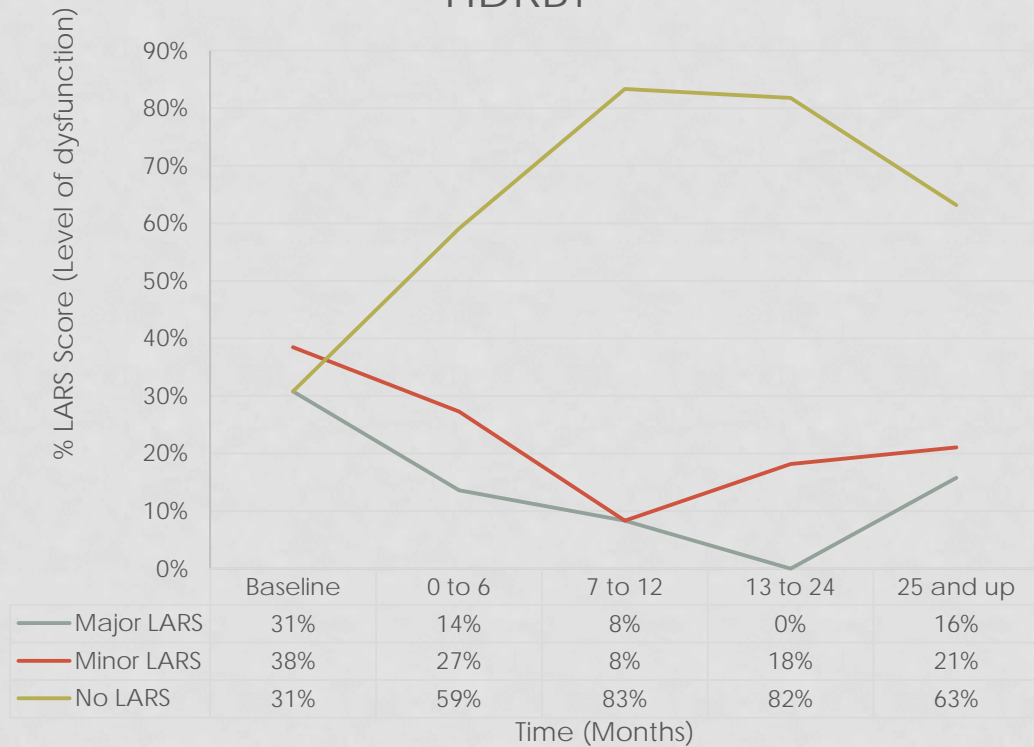
Percentage of Minor LARS patients per treatment modality



Percentage of No LARS (Normal function) patients per treatment modality



Percentage of Major, Minor and No LARS patients treated with EBRT + HDRBT



IN SUMMARY

- Rectal preservation strategies with EBRT and HDRT result in best preserved bowel function than conventional surgical strategies.
- These study results support the development of present rectal preservation strategies for patients with rectal cancer.