

PRELIMINARY OUTCOMES AFTER TOTAL MESORECTAL EXCISION (TME) IN BC

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Outcomes for rectal cancer management in British Columbia (BC) were previously reported for the year 1996 and were proven worse than the reported standard of less than 10% [1-3]. Subsequently, a large Dutch TME study reported benefit from preoperative short course radiation in resectable rectal cancers treated with TME [4]. As a result, in 2002 and 2003, strategies were implemented to improve surgical and pathologic rectal cancer techniques and reporting. Management and initial surgical and pathological outcomes of a cohort of non-metastatic rectal cancer patients referred to the BCCA in the 12 month period immediately following educational workshops are reviewed below.

BACKGROUND & STUDY

Previously - High Local Recurrence For Rectal Cancer Therapy In Bc

The BC 1996 review found:

- Stage 3 cancers had 27% local recurrence
- Only 10% of cases were reported to have had TME

Compared to the Dutch rectal cancer trial where there was only a 4.3% local recurrence rate for stage 3 cancers.

Difference in treatment strategies:

- The use of preoperative short course radiation
- The use of TME as a surgical technique

Strategy To Improve Local Recurrence

1. Educational Workshops were carried out in 2002-03. Strategies included:
 - Standardize preoperative imaging and preoperative radiation (+ postoperative chemo)
 - Standardize surgery = TME
 - Standardize pathology processing and reporting
2. Outcomes review and feedback to surgeons
3. Surgical Oncology Network introduces the rectal template for operative reporting

HAS THERE BEEN AN IMPROVEMENT?

A cohort consisting of BC rectal cancer patients referred to the BC Cancer Agency and diagnosed in the 1st year after the educational workshops (Oct. 2003 to Sept. 2004) was reviewed. After exclusions 340 patients were included

Patients were excluded if they had:

- In-situ disease
- Metastatic disease at presentation
- No surgical resection or attempted surgical resection
- Recurrent rectal cancer

RESULTS

The Use of Adjuvant and Neoadjuvant Therapy Increased

- Approximately 36% of all incident cases received adjuvant or neoadjuvant therapy treatment in 2003.04 compared to 17% in 1996.

Tme Reporting Improved

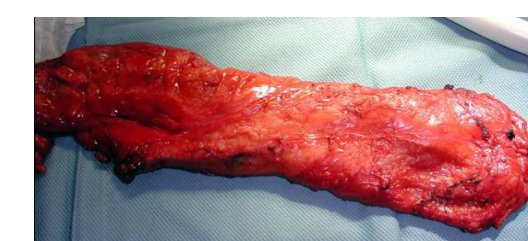
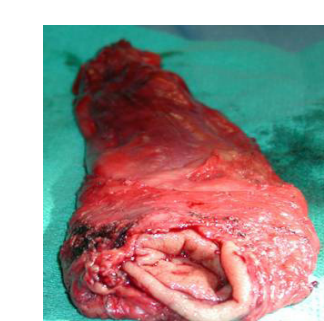
- TME was reported as the surgical procedure in 78% of cases compared to 10% in 1996.

Tme Grade (Quality Of Specimen) Remains Under Reported

- Pathologic reporting of TME specimen quality remains under reported at 46% versus less than 5% in 1996.

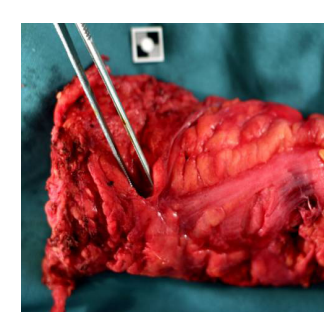
Of the Specimens where quality was reported

72% were Grade 3 (Good)



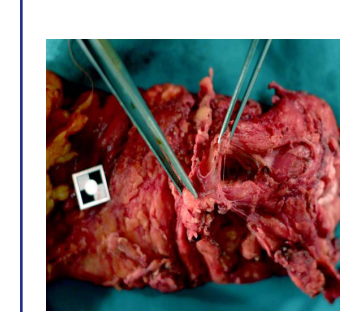
Good –
No defect in mesorectal visceral fascia
TME complete

16% were Grade 2 (Fair)



Fair – Minor defect
TME comple

12% were Grade 1 (Poor)



Poor – Major defect
TME incomplete

- By comparison, the Dutch study reported a rate of 24% incomplete TME.

Radial Margin Status Assessment Increased

- Assessment occurred in 97% versus in only 50% in 1996

Number of Lymph Nodes Reported is Improving

- An average of 11 lymph nodes were reported versus 6 in 1996
- A minimum of 12 lymph nodes is recommended to provide adequate lymph node staging

FURTHER RESULTS AND CONCLUSIONS

Radial Margin Positivity (<1mm) For Distal Rectal Cancers Requires Attention

	2003/04 BCCA Cohort	Dutch Trial
Upper (11-15 cm)	14%	14%
Mid (6-10 cm)	4%	13%
Distal (1-5 cm)	32%	27%

- Radial Margins were reported in 97% of cases compared to 50% in 1996

Locally Advanced Cancers have High Margin Positivity

Resectable tumours had a margin positive rate of 12% compared to locally advanced tumours with a rate of 32%.

APR Utilization Unchanged

- <5cm (distal) = 86%; >5cm = 18%
- In 1996, overall APR rate was 33%
- The Dutch Trial rate was 30%

- PLAN: Conduct Distal TME Course to increase sphincter-preserving resection and decrease APR rate to <20%

Summary

- Increase in utilization of adjuvant therapy
- Improvement in TME reporting
- Pathologic TME specimen quality remains under reported
- Increase in radial margin assessment
- Increase of lymph node reporting required
- Radial margin positivity for distal cancers requires attention
- Locally advanced cancers have high margin positivity

Conclusion

- Educational intervention significantly impacted surgical and pathological outcomes.
- Provincial practice guidelines have been amended to specify that all patients with Stage II and III distal disease are treated with pre-operative down-staging chemoradiation.
- Further education sessions to address the optimal approach for distal cancers are required.

References

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