Réseau de cancérologie Rossy | Rossy Cancer Network

Decreasing unplanned hospital and emergency visits during the peri-treatment period for H&N patients undergoing chemoradiation therapy

RCN Head & Neck Disease Site Group

HEAD AND NECK DS CO-LEADS

Drs. Khalil Sultanem and Anthony Zeitouni

Co-lead objectives:

- Identify indicators together
- Led by indicator results, work to improve/standardize care
- Hold Annual General Meeting (AGM) for all H&N staff as a means to communicate objectives, discuss advances in H&N and improve practice.

The group is supported by Jida El Hajjar, RCN project manager and Sarita Benchimol, RCN site facilitator.

STEERING COMMITTEE

The Head and Neck steering committee, chaired by the Co-Leads, will have met 3 times in 2017 (March, June, November).

Name	Institution	Discipline
Alex Mlynarek	JGH	Surgeon
Martin Black	JGH	Surgeon
Michael Hier	JGH	Surgeon
Christina Macdonald	JGH	Nurse Navigator
Gina Mills	JGH	Speech Pathologist
Nathaniel Bouganim	MUHC	Medical Oncologist
Georges Shenouda	MUHC	Radio-Oncologist
Keith Richardson	MUHC	Surgeon
Nader Sadeghi	MUHC	Surgeon
Elizabeth Blouin	MUHC	Nurse Navigator
Jida El Hajjar	RCN	Project Manager
Sarita Benchimol	RCN	Facilitator

PREVIOUS ACHIEVEMENTS

INDICATOR HN1: Ensuring a multidisciplinary approach to treatment planning for all H&N cancer patients

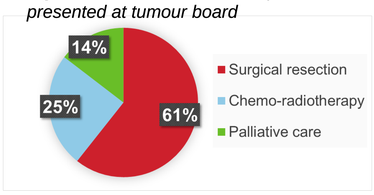
Of the 522 patients diagnosed in the two-year evaluation period (2014, 2015), **15% were NOT presented** at the H&N tumour board.

- For the majority of non-presented cases, multiple causes were identified (Table 1)
- The vast majority of the non-presented represented early stage (I-II) disease (78%) and most were treated by surgical resection.

***Table 1** : Reasons why cases were not presented at tumour board*

Reason	N (%)
Presented at another site	7 (9%)
Delayed 2° morbidity	6 (8%)
Delayed 2° mortality	4 (5%)
Refusal of treatment	6 (8%)
Awaiting investigations	0
Unknown	55 (71%)
Total	**78**

***Fig 1** : Treatment outcome for patients not presented at tumour board*



WHAT WAS DONE TO IMPROVE?

- Letters sent to clinicians who were identified as not presenting their cases and to sensitize the group about the importance of multi-disciplinary discussions/review.
- Implemented electronic templates to standardize documentation and measure patient outcomes after start of treatment.
- Indicator will be evaluated again next year.

This project was led by Marco A Mascarella MD
Otolaryngology – H&N Surgery Resident
Poster presentation at CPAC meeting in TO, April 2017

INDICATOR HN2: Rate of unplanned hospital and emergency department visits during the peri-treatment period for HN cancer patients undergoing chemoradiation therapy

- Many advanced HN cancer patients receive chemoradiation, which is associated with significant toxicity.
- A better understanding of the rate of hospital admission (HA) and emergency department (ED) visits for patients undergoing chemoradiation can lead to policy implications and targeted interventions for patients at risk.

We analyzed the rate of HA and ED visits of HN cancer patients at RCN hospitals from 2014 to 2017.

64% of HA and ED visits are due to treatment complications with dehydration as main causality (Fig 2).

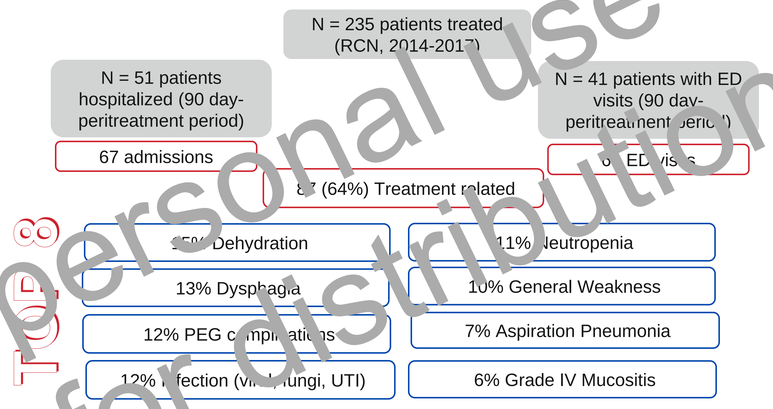


***Fig 2:** 92 patients out of 235 had ED visits and HA during their peri-treatment period. 64% of these visits were due to treatment complications with dehydration as main cause of hospitalization.*

We compared our current data analysis (2014-2017) to a previous study that was done at the Jewish General Hospital (2001-2012) and observed an important decrease in the rate of ED visits (Fig 3). This decline can be explained by the implementation of nutrition monitoring clinics for patients with Head and Neck cancer at JGH.

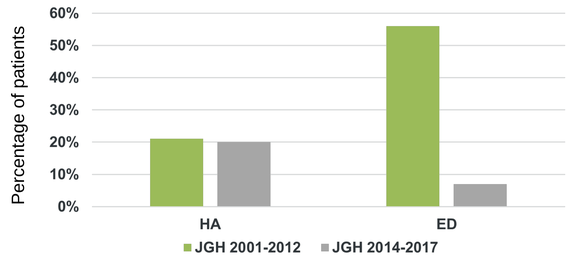


***Fig 3**: Percentage of Head and Neck cancer patients who went to the emergency rooms or were hospitalized due to treatment complications.*

We selected the Cancer Care Ontario (CCO) study by Eskander et al. 2015 as our benchmark and observed the following:

- HA and ED visit rates are lower at the RCN compared to Ontario.
- The variance between the MUHC and JGH may be due to the differing toxicity profile of the chemotherapy regimens given at each institution (high dose cisplatin at MUHC vs carboplatin/paclitaxel at JGH) (Table 2).

***Table 2:** Rate of HA and ED visits during the 90-day peri-treatment period. Rate is calculated by number of ER and/or HA divided by total number of risk days of patients (up to 90 days from last day of chemoradiation)*

	CCO* 2008-2010	RCN N=235 2014-2017	JGH N=144 HA=38 ED=12	MUHC N=91 HA=29 ED=57
Rate of HA / patient	**0.26**	**0.19**	**0.18**	**0.21**
Rate of ED visits / patient	**0.60**	**0.20**	**0.05**	**0.42**
Rate of HA + ED visits / patient	**0.86**	**0.39**	**0.23**	**0.63**
Rate of HA + ER visits related to treatment complications / patient	***	**0.25**	**0.14**	**0.42**

**N=3,920 (patients undergoing surgery, radiation, and chemoradiation). The rates shown are only for patients who received concurrent chemoradiation therapy (Eskander a et al. 2015).*

WHAT IMPROVEMENT WILL HAVE THE MOST IMPACT ON PATIENT CARE?
Suggestions are proposed and will be discussed at November H&N SC meeting:

- Implementing prophylactic aggressive hydration protocol
- Addressing issues of PEG complications (infection and accidental displacement) with gastroenterology.
- Encouraging new chemotherapy protocols to give for advanced HN cancer patients across RCN

Head and Neck Annual General Meeting (AGM)

The goal is to create a platform to improve the quality of patient care by promoting an interdisciplinary team-based approach.

Objectives:

- Introduce new ideas and propose collaborative projects
- Discuss the latest advances in HN
- Foster consensus on the clinical management of HN patients
- Promote enrolment in clinical trials.

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Next AGM
Nov 16 at 13:00 – 15:30 at Le Pois Penché
Agenda

- HN group – issues and priorities
- Immunotherapy in the adjuvant setting
- The future of robotics trials (Orator/Orator 2)
- Latest approaches in radiation oncology
- Clinical research proposals

For questions, contact jida.elhajjar@mail.mcgill.ca

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