Do We Need to Improve the Coordination of Multidisciplinary Care for Patients with Head and Neck Cancer?

An Investigation of Hospital Emergency Department Visits by Patients with Oropharyngeal Cancer in Ontario

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Context – Oropharyngeal Cancer

Typical treatment
• Radiation treatment (RT) with or without concurrent chemotherapy is the standard of care for patients
  • Approximately 70-80% receive concurrent chemo-RT

What does this mean for patients?
• Typical treatment schedule
  • 7 - 8 weeks
  • Seen in by radiation therapists 5 days/week while receiving RT
  • Seen by a radiation oncologist, radiation nurse, medical oncologist weekly

• Common side effects
  • Difficulty eating, chewing, swallowing → Dehydration
  • Fever, infection

Acute toxicity of treatment is well recognized and highlights the need for a multidisciplinary approach to management
Why did we look into this?
Background

- **CCO H&N Cancer Organizational Guideline** (2009)
  - Multidisciplinary team approach
  - Training/Experience
  - Volumes
  - Infrastructure

- Cancer System Quality Index (**CSQI**) – Unplanned visits to Hospital during Chemo
  - Approx. 50% of patients receiving adjuvant chemo for breast or colorectal cancer visit the ED or are admitted to hospital within 4 weeks of treatment

- 2014 CSQI - approx. 30% of patients with oropharynx cancer visited the emergency department during RT (2011-2013), some regional variation

- 2014/15 – further investigation of this data

In order to assess the availability of appropriate supportive care for this patient group, patients’ emergency department (ED) use during RT was investigated.
What did we look at?
Methods

Sample

- Patients with a diagnosis of oropharyngeal cancer
- Received radical RT in an Ontario Regional Cancer Centres (RCCs)
- Visited the Emergency Department (ED) while receiving RT

Time period

- April 1, 2011 and March 31, 2014

Data Sets

- CCO’s Activity Level Reporting (ALR) database
- The National Ambulatory Care Reporting System (NACRS) administrative dataset of the Canadian Institute of Health Information (CIHI)
What did we find?
CSQI 2015 Data

ED Visits by Patients with Oropharynx Cancer While Receiving Radiation Treatment

Figure 1: Percentage of oropharynx cancer patients who visited the emergency department during a course of radiation treatment, April 2011 - March 2013 & April 2012 - March 2014, by region

- 28% provincial average
- + data not displayed due to low volumes
Why did patients go to the ED?
Reasons for ED Visits - ‘Top 5’

- Neutropenia / Fever / Infections: 21%
- Nausea / Vomiting / Dehydration: 18%
- Constipation: 15%
- Other or unspecified medical care: 6%
- Blank*: 4%

*Blank represents unspecified reasons for ED visits.
When did patients go to the ED?
30% of ED visits occurred in the first week of treatment
Percentage of ED visits occurring during regular hours, after hours, and on the weekend (overall and by RCC)

+ data not displayed due to low volumes
What type of patients went to the ED?
Percentage of ED visits and Total Treated Cases, by patient age band

![Bar chart showing the percentage of ED visits and total treated cases by patient age band. The age bands are 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80-89, and 90+. The chart displays the percentage of ED patients and the percentage of total treated patients.]
Discussion

• Results suggest that **supportive care needs** of this population are not being regularly met
  • Approx. 30% of patients go to ED at least once during RT
  • >80% of ED visits are during regular RT clinic hours

Why is this work important?

• Provision of person-centred care
• Quality of care
• Value for money
Further work is necessary

- Better understand the reasons for ED visits in this group of patients
- Identify areas in which investment in quality improvement may be warranted

Next steps

- Continue to monitor
  - CSQI indicator, more detailed analysis
- Collaboration between CCO, RCCs, and ICES
  - Population based assessment of ED visits and hospitalization of HN cancer patients in ON
  - Potential ‘site chart audits’ to further understand the reasons for ED visits
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Questions?

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