Monitoring the rate of positive surgical margins after radical prostatectomy and improving access to treatment (neo-adjuvant chemotherapy and cystectomy) for bladder cancer patients

RCN Genitourinary Disease Site Group

**GENITOURINARY DS CO-LEADS**

Dr. Franck Bladou and Dr. Simon Tanguay

Support staff:
- Aïla’a Ali (Project Manager)
- Mohammad Afshin (Facilitator)
- Étienne Fortier-Dubois (Data Administrator)

**2017-2018 PRIORITIES**

**PATIENT IMPACT DESCRIPTION**

**REDUCE RECURRENCE**

- Monitor positive surgical margin rates to ensure best surgical quality when performing radical prostatectomy

**INCREASE SURVIVAL**

- Identify actionable improvements to ensure earlier surgical intervention (cystectomy) for bladder cancer patients

**INCREASE SURVIVAL**

- Ensure that patients with a biochemical recurrence after a radical prostatectomy are treated with salvage radiation therapy in a timely fashion

**STREETING COMMITTEE**

Meetings are generally called when indicator results need to be discussed and decisions made pertaining to improvement efforts.

2017 Meeting dates: March 20, September 18

**INDICATOR GU1:**

Positive surgical margin (PSM) rate for radical prostatectomy

- **Key Messages**
  - During radical prostatectomy, surgeons must remove all prostate cancer cells while leaving enough surrounding tissue to preserve erectile function and bladder control. This balancing act may result in some cancer cells remaining, a condition termed "positive surgical margin" (PSM).
  - PSMs may generate anxiety and increase the risk of biochemical recurrence (BCR). Thus, the rate of PSM is considered an outcomes measure of surgical quality. Additionally, the likelihood of BCR is increased in cases where PSM length exceeds 3 mm, especially in patients with lower risk disease.
  - A consensus guideline, published in the Canadian Urological Association Journal in 2010, determines that an acceptable rate of PSM is <25% for organ-confined disease (stage pT2).

**Indicators**

<table>
<thead>
<tr>
<th>Year</th>
<th>pT2, PSM &lt; 3 mm</th>
<th>pT2, PSM ≥ 3 mm</th>
<th>Median</th>
<th>75th percentile</th>
<th>90th percentile</th>
<th>Target</th>
<th>Mean/SD</th>
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**Fig 1:** Rates of positive surgical margin for pT2 disease across the RCN, by fiscal year

**Fig 2:** Time to biochemical recurrence for pT2 disease, by margin status and length

**Suggested improvements:**

- Support each other’s efforts in improving cancer care quality and innovation.

**2014 CQI Research Grant – F. Bladou**

Improving the Quality of Care to Kidney Cancer Patients Undergoing Nephrectomy: Introduction of an Enhanced Recovery After Surgery (ERAS) Program

**2014 CQI Research Grant – A. Dragomir**

Castration-Resistant Prostate Cancer: Evaluation of Associated Costs in a Real Life Setting

**2014 CQI Research Grant – L. Campeau**

Rectal toxicity prediction using accumulated-DVHs (dose-volume histogram) analysis

**2015 CQI Research Grant – J. Kildea**

Rectal toxicity prediction using accumulated-DVHs (dose-volume histogram) analysis

**2016 CQI Research Grant – J. Kildea**

Rectal toxicity prediction using accumulated-DVHs (dose-volume histogram) analysis

**Key Messages**

- 36% of eligible patients did not get NACT, mostly by choice.
- For patients who did not receive NACT, the median delay between diagnosis and surgery is 77 days, which is within the target of 90 days. However, the MUHC median is 77 days compared to the JGH median of 105 days.
- Suggested improvements:
  - Dialogue with outside referral centers to encourage earlier patient referral (A-9-GF)
  - Prioritize all NACT patients when triaging for earlier chemotherapy access (E-HF)

**Table 1. Summary statistics (in calendar days) for delays in the trajectory**

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon Tanguay</td>
<td>MUHC</td>
<td>Uro-oncologist</td>
</tr>
<tr>
<td>Marie Vanhuyse</td>
<td>MUHC</td>
<td>Medical oncologist</td>
</tr>
<tr>
<td>Lul Souhami</td>
<td>MUHC</td>
<td>Radiation oncologist</td>
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<tr>
<td>Fadi Benni</td>
<td>MUHC</td>
<td>Pathologist</td>
</tr>
<tr>
<td>Franck Bladou</td>
<td>JGH</td>
<td>Uro-oncologist</td>
</tr>
<tr>
<td>Cristiano Ferrario</td>
<td>JGH</td>
<td>Medical oncologist</td>
</tr>
<tr>
<td>Tamir Nasri</td>
<td>JGH</td>
<td>Radiation oncologist</td>
</tr>
<tr>
<td>Mona Aalamein</td>
<td>JGH</td>
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<tr>
<td>Alla’a Ali</td>
<td>RCN</td>
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<td>Mohammad Afshin</td>
<td>RCN</td>
<td>Facilitator</td>
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For questions, contact alia.ali@mcgill.ca