Fall 2022

NSIR-RT BULLETIN

Welcome to the electronic bulletin of the National System for Incident Reporting - Radiation Treatment (NSIR-RT). This bulletin supports continuous learning from incident data through the presentation of data trends and case studies. It also provides system users with information on program developments and enhancements.

RO-ILS Case Study Focuses on Treatment Planning for Patients with Cardiovascular Implantable Electronic Devices

Sponsored by Astro and the American Association of Physicists in Medicine, RO-ILS (Radiation Oncology Incident Learning System) recently published a case study about a patient with metastasis to the sternum and thoracic spine who was scheduled to have palliative radiation therapy. Treatment had to be rescheduled due to a cardiovascular implantable electronic device (CIED) - a highly radiosensitive device used to regulate the patient's heartbeat – that was not accounted for during treatment planning.

The case study offers four lessons learned/mitigation strategies:

1. Safety fundamentals like documentation, standard protocols and detailed checks are necessary to avoid errors.
2. As technology advances, radiation treatment teams must remain up to date on advancements in other medical fields where there are potential implications to safe delivery of radiation therapy.
3. Explore all treatment considerations for patients with CIEDs to minimize risk of device damage during treatment.
4. Near miss events provide an opportunity to learn and strengthen practices.

In the spring 2022 NSIR-RT Bulletin, *Stories from Users* focused on radiation treatment for patients with implantable medical devices. The article offers eight considerations for developing institution-specific policies and procedures for treating people with implantable medical devices. Considerations for clinical practice were derived from an evidentiary base and a thematic review of current CIED policies across integrated cancer programs.

About the NSIR-RT Bulletin

Published since 2016 by CPQR's NSIR-RT Advisory Committee, with support from the Canadian Institute for Health Information (CIHI) and since 2021 from CAPCA. For earlier editions visit the CPQR website .

We would love to hear from you with ideas for future case studies. We're also interested in relevant patient testimonials relating to safety during radiation treatment.

Please contact Staci Kentish, CAPCA Program Coordinator, at skentish@capca.ca with content ideas or a patient quote on safety.

ABOUT CAPCA

The Canadian Association of Provincial Cancer Agencies (CAPCA) works to improve cancer control across Canada. CAPCA envisions Canadian cancer control systems that are collaborative, patient-centered, and high performing by international standards.

CIHI CAPCA CPQR Canadian Partnership for Quality Radiotherapy PCQR Partenariat canadien pour la qualité en radiothérapie

A Patient Partner's Perspective on Safety in the Radiation Oncology Department

By Louise Bird, patient representative on the CPQR Steering Committee and NSIR-RT Advisory Committee

Hello everyone! I am a 20-year breast cancer survivor who has been part of CPQR since 2011. I credit radiation therapy with saving my life.

Helping your patients play an active role in their own safety before treatment begins

I work in education and feel there is a need for every patient to be educated on the radiation therapy process before they begin treatment. Your approach should consider all patients, bearing in mind that everyone learns differently.

A key suggestion for members of the radiation treatment team:

Think of education materials as a way of building a rapport with your patients – when they feel comfortable talking to their care team, they will be more likely to speak up if something does not feel right. Educating patients up front will give them a chance to review the materials and understand what is going to happen at their appointment. It will also give them an opportunity to form and ask questions.

My cancer treatment story

My first cancer experience started in July 2002. I had what they thought was a fluid filled cyst, which they treated with antibiotics. It did not change and by September the cyst was getting bigger, so they booked me an appointment with a general surgeon in Regina, Saskatchewan. I met the general surgeon at the Emergency Department in October 2002. They drained the cyst, and I was booked for a mammogram. I went for my mammogram appointment and the tech took one look and said, "I cannot mammogram that breast. I need to do an ultrasound; however, your general surgeon is away."

Fast forward to the first week of December, I asked for a second opinion and finally got to see another general surgeon. Everything happened rapidly after that - I had eight rounds of chemotherapy followed by surgery.

The first time I had radiation therapy they discovered that I was booked on the wrong machine halfway through the marking process. I heard the staff talking about it though nobody explained the situation to me. I wondered how this had happened. They had done the identity check, so they knew they had the correct person. We were halfway through the marking process, and I was cold and stiff from lying on the CT table for what seemed like forever, when we started all over again. Nobody took the time to explain to me why or how it had happened.

This may seem like a minor issue, but I was left with the stress of wondering if it could have been a safety issue. The change had a serious impact on my quality of life.

Key Takeaway

Think of communication as a safety tool - by building a relationship with your patient, they will feel more comfortable playing an active role in their own safety.

I had free housing arranged to start therapy the following Monday (my friend was going to be away for the month of August, and I could have stayed at her place), but by moving my date to the following month in order to change to the correct machine this was no longer an option.

When I finally started radiation treatments a month later, things seemed to run very smoothly in the department. The technicians who lined me up (or as I jokingly called it "connected my dots") were very friendly and made small talk during the treatments. The familiarity gave me a sense of comfort and made it easier to speak up and talk to them. Think of communication as a safety tool, by building a relationship with your patient, they will feel more comfortable playing an active role in their own safety.

With everything going well, the twenty-eight treatments seemed to fly by. I did not suffer from radiation burns as I was told to expect. Other than the initial error with being booked on the wrong machine and having my treatments delayed, I was not aware of any issues.

Two months later, I was supposed to be having my last appointment with my general surgeon. Instead, they found a new tumour in a lymph node in my right axilla. Once again, there were challenges in the diagnosis and initial treatment stage. I was booked for a CT and bone scan on the same day and ended up reacting to the CT medium while going through the bone scan machine. Then, despite chemotherapy, the tumour grew, I ended up being hospitalized with an infection at the biopsy site and had several blood transfusions. I had an MRI to see if the tumour had vascular involvement and they biopsied the tumour again. The biopsy revealed it was estrogen positive and not HER2 as previously thought.

Being estrogen positive changed everything, I was no longer dying of metastatic breast cancer. The new treatment game plan was a course of radiation therapy to try to shrink the tumour and then a surgery. I am not going to lie, moving my arm into the necessary position was very uncomfortable. I was prescribed strong pain medication and my days during treatment consisted of radiation therapy and sleeping. It was all worth it, my tumour started to shrink.

Small actions make a big difference to the patient experience

After two rounds of radiation treatment, I better understood the role I played in ensuring my safety during treatment and identified how my radiation team could improve my feeling of safety and my overall well-being:

By developing a relationship with my care team, I felt more comfortable speaking up if something did not feel right. Understanding any changes to the treatment plan and being given an opportunity to ask questions is important. Hearing members of my team talking, but not communicating with me directly, made me feel uneasy. Their friendliness, even just a little small talk, and efforts to keep me informed went a long way to putting me at ease.

Continuing Education

CPQR's *Radiation Treatment Incident Investigation Independent Learning Course* continues to be available free of charge on the CPQR website.

The program teaches how to improve overall patient care and outcomes, including:

- effective investigation of local incidents using the Canadian Patient Safety Institute (CPSI) guidelines
- how to identify trends through local and pan-Canadian incident analysis
- how to inform programmatic change

NSIR-RT BY THE NUMBERS

2015 to November 2022

Incidents Submitted	6,886
Actual Incidents	4,575

Overall Severity

None	3,470
Mild	1,022
Moderate	74
Severe	9

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