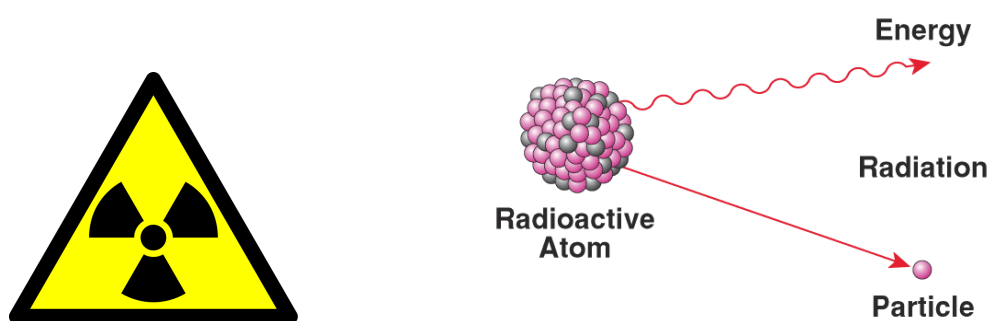


A visit to Riverside

Kate was sitting in the back of the family car as it entered the grounds of the Hospital and turned left following the sign that said “Riverside Departments”. Mum had a coupon that allowed them to use special parking. “Parking for Oncology Patients ONLY” the sign read.

The three of them got out of the car and walked towards the Oncology Department. Kate noticed the nearby river glistening in the sun, the blossom trees in full flower and thousand upon thousands of daffodils covering the nearby park, like a floral carpet. Neither Mum nor Nana said anything on the walk to this fortress like building.



Lots of concrete and the triangular logos were what Kate noticed. They took a seat in the waiting room and, well, waited. Medical looking people in uniforms came and went, from time to time taking people into Room 2 or Room 3 dressed in a white gown. Kate wasn't up for talking to the strangers around her but Nana was all for it. It seemed as if she had a group of new friends, but that she had known them for ages. Kate could tell that some of them were different types of people to Nana but it didn't seem to matter. Nana had worked at the Post Office serving customers, for as long as Kate could remember. The man she was talking to looked rich and important with white hair and a trim moustache. He had been a Senior Partner in a Law Firm in the centre of town. “Boston Legal?” thought Kate before dismissing it as a silly thought. Robert told Mum he had had 15 treatments and would finish the last 5 treatments next week. “I'm started to get sunburnt now” Robert told Nana, “but nothing to complain about”.

Nana had had 8 treatments and was starting to feel more tired than usual. Mum had explained to Kate that these were some of the symptoms that radiotherapy patients may get. Kate's head had been set spinning when Mum told her that Nana, aged just 57 had been diagnosed as having those dreaded words: breast cancer.

Discussion questions

- 1) Why was Kate's Nana given special parking?
- 2) Why did the building have lots of concrete?
- 3) How would you know you are at a place containing radioactivity?
- 4) What are 2 possible symptoms of radiotherapy?
- 5) Why would people that had never met each other suddenly become friends?

Kate had decided that medical people seem to have a language of their own. To understand more, she looked up meanings of some of these words by typing in *define cancer*, *define oncology*, *define radiotherapy* etc on the Google search engine. Cancer she discovered was when body cells started growing in an uncontrolled way and could spread through the body. Oncology was a big word but it was not a total mystery as this “ology” bit meant the study of, like biology was the study of life. It turned out the “onc” was to do the tumours, which was what a group of cancer cells were called. Radiotherapy turned out to be the good news, it was defined as the use of high-energy radiation from x-rays, gamma rays, neutrons to kill cancer cells and shrink tumours. “So, let’s get this right” said Kate to a radiotherapist who asked the family if they had any questions when they first visited, “Oncology is about studying cancer and radiotherapy is the treatment they use to destroy the tumour”. The radiotherapist had congratulated Kate on her understanding.



Discussion questions

- 6) What are cells?
- 7) What do we call cells that grow in an uncontrolled way?
- 8) What is the name for the study of cancer tumours
- 9) Why is radiotherapy good news?
- 10) Where do we find x-rays, gamma rays and neutrons?

Nana had changed into her gown by now. Robert was talking about the meeting he would be having with the oncologist a month after his treatment finished when a radiotherapist came and fetched Nana. Kate remembered the first time she had gone with Nana and Mum into the treatment room. It was massive and Nana looked tiny lying on the table sandwiched between the table and the huge head of the machine. Nana had showed them “her tattoo”. You had to understand, Nana was not the sort of person to get a tattoo but the radiotherapists had made a couple of permanent dark blue dots on her chest area. These, they explained were like reference points so the radiation always hit the right area. “Hit the bad cells, not the good cells” she was told. The machine had whirred as it turned, sometimes more than 180 degrees. It was operated by the radiotherapists entering numbers into the control panel and she could see a large display of numbers in red, changing as the machine turned. Red laser lines would cross Nana’s body showing where the radiation was to hit. Everyone except Nana left the room when the machine was set to go.

Kate had imagined that it must have been very lonely and frightening for Nana in there by herself, surrounded by this huge machine and just a few machine sounds. That wasn't the way Nana saw it though. She was more than happy to spend a few minutes in there because for her it was a way of destroying the cancer cells. "Besides" Nana told her, "this treatment has been round for ages. In fact it was a New Zealander, Ernest Rutherford, who said that these atomic particles he was studying could be used for good, to treat people with cancer."

As they walked back to the car, Kate noticed the daffodils and it finally clicked. The daffodil is one of the first flowers of spring, those bright yellow blooms reminding people of the joys the new season will bring. It represented the hope there is for those affected by cancer.

Next spring, Kate decided, she would be wearing a daffodil.

Discussion questions

- 11) In a hospital a doctor decides what the right treatment for a patient is, and a nurse carries out the treatment. How is an oncologist like a doctor and a radiotherapist like a nurse?
- 12) What was Nana's tattoo for?
- 13) Why was Nana not scared?
- 14) How is a famous New Zealand scientist connected with radiotherapy?
- 15) What time of year is daffodil day?

More word power

Some of the words in the article may be new to some readers. To increase wordpower complete the following exercises 1) to 6).

1) Mix and match the following terms and definitions

| Term | Meaning |
|-------------|---------------------------------|
| Patient | To rid one's mind of |
| Triangular | Sign of disease or treatment |
| Dismissing | Having 3 sides |
| Complain | Someone needing medical care |
| Symptoms | Express feelings of unhappiness |

2) Mix and match the following terms and definitions

| Term | Meaning |
|-------------|---|
| Cancer | Study of cancer |
| Oncology | Part of atom |
| Tumour | Energy moving as wave or particle |
| Radiation | Harmful and uncontrolled growth of cells |
| Neutron | Abnormal growth, may be harmless or harmful |

3) Mix and match the following terms and definitions

| Term | Meaning |
|-----------------|---|
| Radiotherapist | Someone who recommends a course of treatment for cancer |
| Oncologist | An indicator that guides |
| Laser | Very small piece or part |
| Particles | Someone treating cancer with radiation |
| Reference point | Intense beam of light |

A visit to Riverside Word Find puzzle

Words to Find:

| | |
|--------------|------------|
| BIOLOGY | CANCER |
| CELLS | DEFINE |
| DESTROY | DIAGNOSED |
| DISMISSING | ENERGY |
| GAMMA | HOSPITAL |
| LASER | MACHINE |
| MASSIVE | NEUTRONS |
| ONCOLOGY | PARTNER |
| PERMANENT | RADIATION |
| RADIOTHERAPY | REFERENCE |
| RUTHERFORD | STRANGERS |
| SYMPTOMS | TATTOO |
| TREATMENTS | TRIANGULAR |
| TUMOUR | XRAYS |

T U I H J P U B I O L O G Y Y O C P R I
I M O N E A C Q G A M M A C G L E C I X
N G C O W R A I B E B E S Z R N G R T W
P L K F P T N Z R I N Y D Z E I K R V D
D N N X R N C B I E A I R R N V I Q O E
E L Y K C E E R E R F I F B E A Y O C S
S A Z S R R R T X C E E N E N S T M L O
T T I T Y M G N S W E M R G D T A P B N
R I N N G P N I M T C L U E A N Q L D G
O P O E O E I Y U B R L L T N X S S B A
Y S I M L R S R Y S A A I S S C C M J I
K O T T O M S D X R L W N P L Y E O B D
U H A A C A I N O E A T A G K R L T B L
P O I E N N M R A D I O T H E R A P Y J
I Z D R O E S W W K R M G R E R Z M Q A
E P A T D N I X Q F G W Q Y C K S Y T Y
R P R P A T D M U M A C H I N E N S Y U
K R B V I E V I S S A M T U M O U R J G
G C L Q R U T H E R F O R D I A N S M F
F L X E T P R F V R S N O R T U E N V D