Picture a Better World for Rare Cancer Patients

Have you heard of a type of cancer that is rare and unique, driven by DNA changes? As we mark Rare Cancer Day this month, we ask Dr Choo Su Pin, Immediate Past President of the Singapore Society of Oncology, to shed some light on TRK fusion cancer, a rare genetic cancer, and how precision medicine can offer new hope to patients and create a more positive picture for their cancer outcome.

If you could picture TRK fusion cancer, how would you describe it?

It's like the winning number in a lottery. TRK fusion cancers are rare and unique. We often think of cancer in terms of the part of the body in which it occurs, but these cancers are caused by genetic mutations that drive these cancers to grow in various parts of the body, in both adults and children.

What are your concerns for patients with rare genetic cancers like TRK fusion cancer?

There are very few effective therapies for rare genetic cancers. It is harder to get evidence for the effectiveness of treatments on these cancers, because they are so uncommon.

The good news is that personalized therapies are now being developed to suit the specific characteristics of patients and their tumors. This is called precision medicine.

These drugs are effective and have fewer severe side effects compared to conventional cancer treatment, which is less targeted. Think of it as watering a plant with a watering can, instead of a garden sprinkler.

Precision medicine can be game changing for patients who have TRK fusion cancers as we now have very effective targeted drugs for their cancers.

What's your experience in treating TRK fusion cancer?

I had a patient who had run out of all standard treatment options for stage 4 pancreatic cancer and was losing hope as the cancer was causing significant symptoms and making her unwell. Pancreatic cancer is an aggressive cancer that is not easy to treat as there are not that many effective treatment options.

This patient was tested and was discovered to have TRK fusion, so she was treated with precision medicine. Her cancer responded beautifully to the treatment and her symptoms went away. She is still on treatment and is doing very well. From struggling to walk out of the door, she has now resumed her normal lifestyle.

I am privileged to have been able to support her by identifying an effective treatment for her cancer that she could tolerate with not many side effects.

What excites you about recent developments in cancer treatment, relating to TRK cancer and other rare genetic cancers?

With the explosion of genomic know-how, we have the tools and the knowledge, and we are getting better at applying them to the clinic so that it benefits patients. I no longer have to tell my patients: “This is a rare cancer. Treatment options are limited”. Now, I can say: “This is a rare cancer, let’s look at its genetic makeup and see if there are effective treatments based on its genetic profile.”

Nonetheless, as with most new treatments, there is always a knowledge, awareness or accessibility gap. In some countries, getting access to certain treatments is challenging as they may not be available locally. When this happens, cancer specialists are less likely to conduct genomic testing to identify the genetic mutation and diagnose the cancer.

Genomic cancer testing is a crucial step in cancer management, painting a more precise picture of a person's individual cancer. Increased education and communication with doctors and patients are essential so that more cancer specialists will recommend genomic screening for newly diagnosed patients, and more countries will make targeted therapies available and accessible. This could potentially change a patient’s diagnosis and course of treatment, offering hope to those living with rare and difficult-to-treat cancers.