



CyberKnife cuts a path to better cancer care

February 2016

Brett Smith was remarkably cheerful as he revealed he had suffered through three types of cancer treatment and had at one point been given only two more years to live.

As he related his story on a hot summer's day outside Sir Charles Gairdner Hospital's (SCGH) Cancer Centre, it was clear his treatment using a hi-tech, robotic radiation machine known as CyberKnife had contributed to his enthusiastic outlook.



Image: Cancer Survivor Brett Smith

How has Cyberknife changed cancer treatment for patients?

“CyberKnife is simply superb. It had a better outcome for me compared to the other forms of cancer therapy I had experienced,” he said.

“Chemotherapy, which is long lasting and makes you feel quite sick, and surgery, which has a very long recovery time, had all heavily impacted on my quality of life.”

WA's Health Department introduced CyberKnife – the only one in Australia – in April 2014 and has since performed more than 500 procedures.

The machine offers the patient the benefit of no incisions; no pain; no anaesthesia; no hospitalisation; and usually little or no recovery time.

Dr Suki Gill, Radiation Oncologist and Director of Research at SCGH Cancer Centre, said CyberKnife was a breakthrough in cancer treatment.

“It is a robotic system for delivering radiation therapy with extreme accuracy,” he said.



Image: CyberKnife simulation at QEII

The myth

“Although its name conjures images of scalpels and surgery the CyberKnife treatment involves no cutting at all. In fact, the CyberKnife system is the world’s first and only robotic radiosurgery designed to non-invasively treat tumours throughout the body.”

Dr Gill said this was far better than conventional radiotherapy because CyberKnife could delivery more concentrated radiation dosages while avoiding damage to healthy tissue.

CyberKnife also reduces the required number of treatments, which for rural and regional Western Australians means only two or three weeks of treatment away from home, instead of the usual six to eight weeks sometimes required with standard radiotherapy.

“By reducing the number of required treatments, the health system can save costs and redirect money towards other necessary resources in the cancer pathway,” Dr Gill said.

Brett Smith concurs.

“Given the amount of money that goes into cancer treatment and the impact it has patients, CyberKnife is an absolutely fantastic investment.

“The patients are less traumatised and have less down time from being sick.

“The money spent on the CyberKnife is an absolutely top-class investment for WA Health.”