

Patient Education for CT – Radiation Risk

Many recent news articles have implicated Computed Tomography (CT) scans as risky procedures that dramatically increase your chance of getting cancer from radiation. As a result, some patients are asking their doctors, “Should I really get a CT scan?”

As with other medical procedures, x-rays are safe when used with care. Radiologists and x-ray technologists have been trained to use the minimum amount of radiation necessary to obtain the needed results. The amount of radiation used in most examinations is very small and the benefits greatly outweigh the risk of harm. There is no conclusive evidence of radiation causing harm at the levels patients receive from diagnostic x-ray.

CT images offer a much greater amount of detail for doctors when making a diagnosis, particularly when it comes to soft (non-bone) tissue. If your doctor suspects that you have a broken bone, he or she will ask for a standard x-ray. But if you are suffering from something more serious, a CT scan increases the chances your doctor can identify it quickly. The radiation dose is higher – yes, but so is the benefit from accurate diagnosis.

It's also important to remember that you are receiving a radiation dose all the time from natural sources around you – solar, cosmic and radiation from rocks, soil and the food we eat. One way to look at risk from x-rays is by comparing the dose to natural radiation. A two-view, plain chest x-ray is equivalent to about seven days worth of natural radiation. A CT exam of the chest is equivalent to about two years of natural radiation.

Here at Jewish Hospital and St. Mary's HealthCare, the dose of radiation is carefully controlled to ensure the smallest possible amount is used that will still provide us a quality result. We are below the minimum American College of Radiology standard on radiation outputs for our CT scanners.

If you are concerned that the possible risk of this exam outweighs the benefit (helping your physician to diagnose and treat your illness), please discuss your concerns with the technologists or your physician.