A Leader of the Pack

Watson Clinic lowers CT radiation dose by 40% to patients across Central Florida with Clarity™ CT

Overexposure to radiation dose from X-ray imaging systems, particularly CT scanners, is quickly becoming a national patient safety concern. Across the US, patients and their families are becoming aware of this issue through national and local media. At Watson Clinic (Lakeland, FL), patient radiation dose levels is a topic years in the making.

Janet Witchoskey, RT(CT), CT Supervisor at Watson Clinic, took the Image Gently pledge in 2008 to lower dose to patients, which included setting-up pediatric protocols. While these steps helped slightly lower dose, there was no massive reduction in dose, notes Chat Viraponshe, MD, neuro-radiologist.

Witchoskey, Dr. Viraponshe, Medha Poutchi-Amin, MD, senior radiologist and Richard Gould, RT, Clinic Director, determined the clinic needed to invest in technology to further lower dose without impacting image quality. In October 2009, Louis Saco, MD, FACP, Chairman and Chief Executive Officer, embraced their efforts and provided funding for the endeavor.

"As a healthcare leader in Central Florida, we had already taken steps to ensure we were protecting our patients — especially our pediatric patients — from overexposure during CT scans," says Dr. Saco. "When our radiology staff discussed implementing technology that could further reduce dose without impacting image quality, there was no question that we would pursue investing in our patients to enhance their safety."

According to Gould, the facility considered options from CT scanner manufacturers. Although the cost was high — nearly a half million dollars — they were committed to dramatically lowering dose for their patients. Then, one of their radiologists discovered a diamond in the rough — Clarity CT from Sapheneia — at one-fifth the cost.

"We had been reading how one facility cut costs by doing all sorts of things to lower dose," explains Dr. Viraponshe. "The question we had asked was, what is the most economical way to do this? Sapheneia allows us to reduce dose in an economical fashion and that’s the main advantage of this particular program."

Sapheneia installed Clarity CT in late summer 2010 on two of three scanners — a 16-slice and 64-slice — resulting in dose reduction of 40% across all studies, Dr. Viraponshe says. Installation did not result in any scanner downtime and was
transparent to the clinic’s operations, adds Witchoskey. The facility’s third CT scanner, part of a PET/CT hybrid imaging system, is being replaced prior to installing Clarity CT.

Historically, lowering dose often compromised image quality, yet that is not the case with Clarity CT. “We are very pleased with the results,” Dr. Vrasopoulos adds, “and I can’t tell the difference in image quality – it looks the same as before Clarity.”

For Witchoskey, in addition to being “wowed” by the image quality, she is impressed with its ease of use. “Clarity CT is so transparent to our workflow that we often forget its there – and that’s key for our daily routine.”

Adds Gould, “With lowering dose now a national concern, we’re leading the pack in our area as far as reducing dose.”

In fact, Witchoskey and her staff started sharing with patients that Watson Clinic is utilizing new technology to lower CT radiation dose, yet still producing high quality, diagnostic images. “We had one patient very concerned and afraid of getting too much dose because we had to scan two different body parts. So we told her about our technology that lowers dose by 40% but still produces high quality diagnostic images. That made her feel much better about having the CT study done.”

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- Richard Gould

With all the media attention on dose reduction, Nancy Martinez, Public Relations Manager at Watson Clinic, plans to educate staff, referring physicians and ultimately, patients on the clinic’s efforts. “Reducing dose is an important component to improving patient care,” she says. “We have a large, respected radiology department with a wide breadth and depth of advanced equipment. Our first step is to make sure our staff is aware that we have this technology so they can inform patients that we are reducing dose and leading these efforts in Central Florida.”

Looking back at the process, Gould recommends that other facilities seek the full support of administration since no additional revenue is gained by investing in dose reduction technology. “We are a leader in Central Florida as far as our technology and patient services,” he explains, “and this effort further differentiates our service to the community.”