Since ascendancy of CT scans in the 1980s, the estimated number of studies performed has increased at least 800 percent. In children, the number of CT scans has increased 2.5 fold just between 1989 and 2001. With the advent of multidetector CT, radiation dose has increased approximately 30 percent with 3D studies adding 3 to 10 times more radiation. Recently an article in the New England Journal of Medicine emphasized that the risk of developing radiation induced cancer in children was increased due to their younger age, longer lifespan, and increased sensitivity to radiation.

The Society for Pediatric Radiology (SPR) together with the American Academy of Pediatrics (AAP), and eleven other medical organizations have formed a multidisciplinary group, the Alliance for Radiation Safety in Pediatric Imaging. This organization represents over 400,000 health care professionals promoting appropriate and high quality CT for children. As part of its education and awareness initiative, the Alliance has developed the Image Gently Campaign. The campaign emphasizes four simple guidelines when imaging children:

1. Reduce or “child-size” the amount of radiation utilized.
2. Scan only when necessary.
3. Scan only the indicated region.
4. Scan once; multiphase scanning is usually not necessary in children.

The Image Gently Campaign Web site, www.imagegently.org, provides a wealth of information regarding CT usage in children, and is available to parents, radiologists, technologists, and clinicians. Another valuable resource to help clinicians decide which imaging study is the best study for a particular child, based on patient history, can be found at American College of Radiology (ACR) Web site: www.acr.org.

Here, various radiological studies have been rated, on a scale from 1 to 10 (best), by a group of multidisciplinary subspecialists as the most appropriate for a specific clinical condition. The appropriateness criteria can be downloaded to desktop computers or PDAs for easy access and reference.

As part of the overall initiative of the Image Gently Campaign, the Pediatric Radiology department at Children’s Mercy will be providing additional information through a series of articles called Commonly Requested, But Misunderstood Imaging Studies: What You Need to Know.

References