

January 4, 2010

Dear Colleague:

At Children's Hospital of Pittsburgh of UPMC, we believe in the "Image Gently" Campaign in pediatric radiology. We take great pride in our dedication to children, and we want to encourage the awareness of high radiation dose during a CT scan in pediatric imaging.

A CT scan is a valuable tool in medical diagnoses, but sometimes the techniques are not tailored to children. Many techniques employed are the same techniques used for adult imaging. This results in a large radiation dose for a child, and since children are more sensitive to radiation, this dose will affect them during their lifetime.

We want to increase the awareness of low radiation dose in children by asking you to focus on some factors that can significantly lower the radiation dose:

- Reduce adult protocols to child size protocols. We can significantly lower the
  radiation dose by lowering the mA and kvp. This can be achieved by adjusting techniques to a
  child's size and weight. Since many protocols are scanner specific and are not transferred to
  other CT units, we ask the technologist, radiologist, and medical physicist to evaluate these
  techniques so changes can be implemented.
- Limit the region scanned to the area of interest. More is not better.
- Perform single phase scans only. Again, more is not better.
- Angle gantry, if possible to avoid orbits. This results in less exposure to the orbital globe.
- Remember to use lead aprons on patients. When shielding patients, more is better as long as it does not affect region of interest.
- Use breast/gonad/thyroid shields. These shields should be used when imaging through neck, chest, abdomen, and pelvis.

If a child was to accompany a group of adults on a fishing trip, which size life jacket would the child wear? Though the answer may seem obvious to most people, a similar scenario in imaging is not as apparent. CT scanning in children is not a "one-dose-fits-all" solution. This is the principle message that Children's Hospital seeks to spread. And it's simple, yet powerful.

Our main goal is to **Image Gently: Reduce Radiation Exposure to all Children** and make others aware of this campaign. If you have pediatric patients in need of CT scans and wish to refer them to Children's Hospital, to schedule an appointment, please call 412-692-5500.

If you have any questions, please contact Sameh Tadros, MD, MSc at <a href="mailto:sameh.tadros@chp.edu">sameh.tadros@chp.edu</a>, Kimberly Bolton, RT (R) (CT) at <a href="mailto:kimberly.bolton@chp.edu">kimberly.bolton@chp.edu</a>, or Barbara Clayton, RT (R) (CT) at <a href="mailto:barbara.clayton@chp.edu">barbara.clayton@chp.edu</a>.

Sincerely.

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