Stewardship of the Body

"I give you thanks that I am fearfully, wonderfully made" (Ps. 139)

CT Scans (Computerized Tomography)

What are CT scans? CT scans are multiple X-rays taken at many different angles and then quickly processed by a powerful computer, producing a series of 2-D pictures that correspond to thin sections or "slices" of the body. These cross-sectional images also can be combined to create a 3-D view of a particular organ or part of the body. Sometimes a contrast material, or dye, is injected through an IV line so that a specific organ or internal structure, such as blood vessels can be highlighted.

What are CT scans used for? CT scans are commonly used to detect internal injuries or bleeding; locate tumors, infections or blood clots; diagnose and monitor diseases; and guide surgeries or other medical procedures.

Are CT scans used a lot? Over 70 million CT scans are performed each year.

What are the benefits of CT scans? They have greatly reduced the need for many invasive procedures, such as exploratory surgery. Also, they have led to improvements in the early detection, diagnosis, treatment and monitoring of many cancers, vascular diseases and other conditions.

Are there risks with CT scans? Although a CT scan is considered a low-risk procedure, it is not completely risk-fee. Some risks include:

- An allergic reaction to the contrast material, or dye, that is used for some types of imaging.
 Most allergic reactions are minor and do not last long; however, in some cases, kidney
 damage can result.
 - o Prevention: Screening methods are used before a CT scan to determine if a person may have an allergy to the dye. Answer all questions accurately.
- Increased amount of radiation exposure. Although experts believe that the risk of causing cancer from radiation exposure from CT scans is small, the risks are being taken seriously.
 - o Prevention:
 - Experts in medical imaging have set guidelines that can help prevent unnecessary CT exams from being ordered.
 - They are working on ways to reduce the doses of radiation needed for effective CT scans.
 - The FDA has begun an initiative to help reduce unnecessary radiation exposure from medical imaging, including promoting safeguards for medical imaging equipment to help ensure proper radiation dosing during procedures.

Bottom line: If you are uncertain as to why a CT exam is being ordered for you or whether another type of imaging might be an option, ask your doctor. Also, don't insist on having a CT exam, especially if your doctor recommends against it.

Source: Mayo Clinic Women's HealthSource, September 2010