

LANCASTER RADIOLOGY ASSOCIATES, LTD.

Diagnostic Radiology (X-Ray)

What it is:

Upon discovery by German physicist Wilhelm Conrad Rontgen in 1895 that electromagnetic radiation can identify bone structures, the "X-Ray" has since been developed as a diagnostic tool to help physicians detect the pathology of the skeletal system, to identify disease and to image other parts of the body including the chest and abdomen. In its medical uses, an X-Ray beam is focused on to an area of interest on the human body, and X-Rays are sent through the imaged part, resulting in an "X-Ray image."

What you need to know:

Diagnostic Radiology studies are acquired either on a digital cassette (computed radiography) or directly to our PACS system (digital radiology or "DR"). Digital radiology has a lower dose for the patient than cassettes, so we attempt to use DR whenever possible, especially in the outpatient setting. The amount of radiation received during most standard diagnostic procedures is negligible, and indeed is similar in dose to a cumulative exposure of background radiation that humans are exposed to naturally each year (300mrem/yr). Even so, radiation exposure is kept as low as reasonably achievable, and is always well within regulatory limits. It is advised that pregnant patients should avoid any unnecessary radiation exposure. However, when medically necessary, certain radiological diagnostics in pregnant patients may be preformed safely after the fetus is appropriately shielded.

How to prepare:

BARIUM ENEMA (Colon or Large Intestine Diagnostic Radiology):

- Obtain what is known as "Fleet Prep Kit 1" from our office or a drugstore. Follow the directions for "24 hour" prep. The examination will take approximately 1 hour.

ESOPHAGRAM SERIES:

- Do not eat or drink 4 hours prior to the examination.

IVP (Intravenous Pyelogram):

- On the day of your examination, you may drink clear liquids up to 1 hour before the exam. Acceptable liquids include clear soups, Jello, coffee or tea (no milk, cream, or nondairy creamer), carbonated beverages, and any other liquid that is transparent.

UPPER GI / SMALL BOWEL SERIES (GI, Stomach, or Small Intestine Diagnostic Radiology):

- Do not eat or drink anything after midnight the night before the examination. In particular, nothing (even water) is to be ingested on the morning of the examination. You'll need to allow about an hour for upper GI exam, and up to 4 hours for small intestine exam.