Diagnostic X-ray and Fluoroscopy Policy and Procedure for Duke-Affiliated Clinics: Pregnant or Potentially Pregnant Patients

PURPOSE: To avoid or minimize unnecessary radiation exposure to the developing embryo or fetus.

APPLIES TO: Duke Primary Care (DPC) clinics and other off-site facilities affiliated with the Duke University Health System that use diagnostic radiography, fluoroscopy or computed tomography (CT), excluding Duke University Hospital, Durham Regional Hospital and Duke Raleigh Hospital.

REGULATORY BASIS: 15A NCAC 11.0603(a)(1)(F)

EFFECTIVE DATE: 3 August 2010

(1) All patients in their reproductive years (between 12 and 50 years of age) shall be questioned as to the possibility of pregnancy. This should be done as sensitively and unobtrusively as possible, in order to protect a woman’s privacy and dignity. Parents or guardians of minor children should not be present during the inquiry regarding the possibility of pregnancy.

(2) The results of the above inquiry notwithstanding, gonad shielding of not less than 0.5 mm lead equivalent shall be used for potentially procreative patients during radiographic or fluoroscopic procedures in which the gonads are in the direct or useful beam, except for cases where doing so would interfere with the diagnostic procedure.

(3) If there is the possibility that pregnancy is likely, the radiologist shall be notified. According to the radiologist’s discretion, a urine or blood test may be obtained to rule out pregnancy.

(4) If it is determined that the patient is pregnant, the radiologist may consult the referring physician, who may determine whether or not the examination may be deferred to a later date. If the examination is deemed to be necessary while the patient is pregnant, she must be informed of the risks to the embryo/fetus that are associated with ionizing radiation. For information on the risks of x-rays during pregnancy, see http://www.hps.org/documents/pregnancyfactsheet.pdf. You may also contact the Duke Occupational and Environmental Safety Office at (919)684-2794 for consultation information.

(5) If the patient consents to proceed with the x-ray examination, she should be shielded to minimize exposure to the embryo/fetus. If the x-ray field includes the abdominal/pelvic region, a modified x-ray examination may be necessary. Modifications in technique may include reducing the kVp, mAs and fluoroscopy time to the minimum values consistent with obtaining the required diagnostic information. Appropriate modification of technique shall be done in consultation with the radiologist.

AUTHORS: Reiman RE, Krieman CA, Moori NM, Egan GD, Woehr W, Barnes LK, Jorgensen DB.

RADIATION SAFETY OFFICER APPROVED: 3 August 2010