



Association for Radiologic & Imaging Nursing

CLINICAL PRACTICE GUIDELINE

Contrast Media Administration to Pregnant or Potentially Pregnant Patients

Overview

Studies regarding the use of contrast (iodinated and gadolinium-based) media in pregnancy are limited, however, human and primate studies have shown intravenous contrast media to readily cross the placenta, entering fetal circulation and subsequently the amniotic fluid. There is presently no data available to assess clearance of contrast media from the amniotic fluid. Short-term and long-term effects of contrast media on the human embryo or fetus are not well understood at this time. Patients of childbearing potential should be carefully screened for the possibility of pregnancy, and the use of contrast media in pregnancy should take place only after careful consideration of the potential risks vs. benefits.

Target Audience

Radiology nurses, radiology technologists, radiologists, radiology administrators, radiology residents & fellows, medical students, other healthcare providers.

Content/Strategies

- A. All imaging facilities should have policies and procedures in place to reasonably attempt to identify pregnant patients before exams utilizing intravenous contrast media are performed.
- B. The American College of Radiology recommends that the radiologist should do the following prior to the administration of contrast media to a pregnant patient:
 - Confer with the referring physician and document in the radiology report or patient record that
 - the information needed cannot be acquired through other means (e.g. ultrasound) or without the use of intravenous contrast media.
 - the information needed affects the care of the patient and fetus *during the pregnancy*.
 - the referring physician thinks it is not prudent to wait until the patient is no longer pregnant to proceed.
 - It is also recommended that both pregnant patients undergoing a diagnostic imaging examination with iodinated or gadolinium-based contrast and their referring physicians should indicate before contrast administration that they understand the potential risks and benefits of the procedure, the potential for risk to the fetus, any alternative diagnostic options, and that they wish to proceed. In the case of exams using iodinated contrast, the pregnant patient and her referring physician must also consider the risks associated with ionizing radiation.

- C. Pre-medications may be necessary for pregnant patients with prior allergic-like reactions to iodinated or gadolinium-based contrast media. Diphenhydramine (FDA category B) and Prednisone (FDA category C) are the most commonly used. Steroid use in pregnancy carries a small risk of fetal adrenal suppression and if used in the first trimester, may also be associated with an increased incidence of cleft lip.

References

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