

The following patients will require premedication before receiving intravascular contrast. Contrast-enhanced CT, IR, or IVP exams should consult items 1, 2, and 3. Contrast-enhanced MR exams should consult item 1 only.

- 1** Premedication is indicated in patients with a prior allergic-like reaction to iodinated contrast material if requesting CT, IR, or IVP; and in patients with a prior allergic-like reaction to gadolinium contrast material if requesting MR. In patients with a history of severe allergic-like reaction to one class of contrast material (e.g., gadolinium-based or iodinated), it is recommended that the same class of contrast material should be avoided in the future. If it cannot be avoided, corticosteroid premedication is recommended.

THIS INCLUDES:

- ALL allergic like reactions, whether considered mild, moderate or severe, including most skin reactions (hives, rash, erythema, itching, nasal congestion)
- Facial or body edema
- Bronchospasm
- Laryngeal edema
- Difficulty breathing
- Hypotension and tachycardia
- Any allergic-like reaction requiring hospitalization or an ER visit
- Cardiopulmonary arrest

THIS DOES NOT INCLUDE THE FOLLOWING NON ALLERGIC REACTIONS:

- Vasovagal reaction
- Nausea
- Vomiting
- Contrast-induced renal dysfunction

- 2** For intravascular iodinated contrast material only (CT, IR, IVP), premedication is indicated if the patient has had a severe allergic reaction to two or more classes of substances (e.g., penicillin and ampicillin would be one class; all food items are considered one class; penicillins and cephalosporins are considered one class because of known cross-reactivity).

THIS INCLUDES:

- **ALL** severe allergic-like reactions
- Severe bronchospasm with hypoxia
- Severe laryngeal edema with stridor / hypoxia
- Hypotension and tachycardia (anaphylactic shock)
- Cardiopulmonary arrest
- Similar-severity reactions

THIS DOES NOT INCLUDE:

- Milder symptoms not listed at left, such as rash, hives or mild respiratory symptoms

- 3** For intravascular iodinated contrast material only (CT, IR, IVP), premedication is indicated if the patient is experiencing an acute asthma exacerbation.

In circumstances where premedication is required, consideration should always be given to performing the examination without IV contrast if the diagnostic information required can be obtained in that manner, or alternate imaging modalities that do not require intravenous contrast (e.g., US, noncontrast MR). Health care providers may choose to provide premedication in other circumstances, but that is at the discretion of both the health care provider and the patient, and is not required for the administration of iodinated contrast within the Department of Radiology.

HOW TO PREMEDIATE for Adult Patient

Standard oral premedication regimen:

- **Prednisone** – 50 mg PO, 13, 7, and 1 hour prior to the procedure*
- **Diphenhydramine** – 50 mg PO 1 hour prior to the procedure **

*Note: Doses may be distributed unevenly to allow a patient to get a reasonable night's sleep the evening prior to the CT; however, the first dose should be taken more than 12 hours before the time the exam is scheduled to be performed.

**Note: It is not critical to administer diphenhydramine as part of the premedication regimen (there are published regimens using corticosteroids only). In other words, although it is part of the UM premedication protocol, it is not considered mandatory.

Alternate IV protocol if a patient cannot take oral medications:

- **Hydrocortisone** – 200 mg IV, 13, 7, and 1 hour prior to the procedure
- **Diphenhydramine** – 50 mg IM or IV, 1 hour prior to the procedure

Urgent IV premedication protocol, when iodinated contrast is needed on an urgent/emergent basis only:

- **Hydrocortisone** – 200 mg IV, 5 hours and 1 hour prior to the procedure
- **Diphenhydramine** – 50 mg PO (or IM or IV, if patient cannot take PO), one hour prior to the procedure (if blood pressure permits)

Note: If clinician prefers, methylprednisolone 40 mg IV can be substituted for hydrocortisone 200 mg, dose for dose.

Source: MD/RHC/JHE/EK 10/1/12

HOW TO PREMEDIATE for Pediatric Patient

Standard oral premedication regimen:

- **Prednisone** – 0.5-0.7 mg/kg PO, 13, 7, and 1 hour prior to the procedure (50 mg maximum dose)
- **Diphenhydramine** – 1.25 mg/kg PO 1 hour prior (50 mg maximum dose)

Source: PJS 1/19/09

Please note: if a patient requires premedication that includes diphenhydramine (Benadryl), they will need to arrange for a driver to and from the appointment, due to the possibility of drowsiness from the required medication.