



## PREMEDICATION ASSESSMENT and PROTOCOL for INTRAVENIOUS CONTRAST ADMINISTRATION POLICY - CT

CMC Imaging Department Policy for assessing risk factors for adverse contrast reactions from iodinated nonionic low osmolality contrast agents for CT and protocol for contrast administration in setting of documented risk factors.

**References:** ACR, manual on contrast media, Version 10.2, 2016

- *Anaphylaxis (an-a-fi-LAK-sis) is a serious, life-threatening **allergic reaction**. The most common anaphylactic reactions are to **foods, insect stings, medications and latex**. Anaphylaxis requires immediate medical treatment, including an injection of **epinephrine** and a trip to a hospital emergency room. If it isn't treated properly, anaphylaxis can be fatal. (ref. <http://www.aaaai.org/conditions-and-treatments/allergies/anaphylaxis> American Academy of Allergy, Asthma and Immunology website.*

### PREMEDICATION PROTOCOL

#### *Elective Premedication*

**Two frequently used regimens are:**

1. *Prednisone – 50 mg by mouth at 13 hours, 7 hours, and 1 hour before contrast media injection, plus Diphenhydramine (Benadryl®) – 50 mg intravenously, intramuscularly, or by mouth 1 hour before contrast medium [12]. or*

2. *Methylprednisolone (Medrol®) – 32 mg by mouth 12 hours and 2 hours before contrast media injection. An anti-histamine (as in option 1) can also be added to this regimen injection [34]. If the patient is unable to take oral medication, 200 mg of hydrocortisone intravenously may be substituted for oral prednisone in the Greenberger protocol [35].*

#### **Emergency Premedication (In Decreasing Order of Desirability)**

- **IV steroids have not been shown to be effective when administered less than 4-6 hours prior to contrast injection.**
- **If one of the following emergency premedication treatments is completed, CMC clinical resources must be arranged to prepare for possible severe reaction. The CT technologist, Imaging RN and Nursing Supervisor/House Supervisor will remain in the Imaging department until the patient has had the IV contrast injection. If any symptoms appear, begin to progress to severe, an ABC alert will be called.**

- 1. Methylprednisolone sodium succinate (Solu-Medrol®) 40 mg or hydrocortisone sodium succinate (Solu-Cortef®) 200 mg intravenously every 4 hours (q4h) until contrast study required plus diphenhydramine 50 mg IV 1 hour prior to contrast injection [35].*
- 2. Dexamethasone sodium sulfate (Decadron®) 7.5 mg or betamethasone 6.0 mg intravenously q4h until contrast study must be done in patient with known allergy to methylpred-nisolone, aspirin, or non-steroidal anti-inflammatory drugs, especially if asthmatic. Also diphenhydramine 50 mg IV 1 hour prior to contrast injection.*
- 3. Omit steroids entirely and give diphenhydramine 50 mg IV.*

***PATIENTS PRESENTING WITH A PRE-EXISTING RASH***

Patients presenting to the Imaging department for a contrasted exam with a pre-existing rash must be evaluated by an RN. Any changes of the rash after IV contrast administration should be documented by an RN.

Documentation in the patient chart of site and severity of rash pre and post contrast injection will be completed by the RN. Depending on the severity the patient may need to be evaluated by the Radiologist or Emergency Medical Provider (EMO).

11/2016 updated



### Premedication Waiver to Proceed with Contrast Injection

- Anaphylaxis (an-a-fi-LAK-sis) is a serious, life-threatening allergic reaction. The most common anaphylactic reactions are to foods, insect stings, medications and latex. Anaphylaxis requires immediate medical treatment, including an injection of epinephrine and a trip to a hospital emergency room. If it isn't treated properly, anaphylaxis can be fatal. (ref. <http://www.aaaai.org/conditions-and-treatments/allergies/anaphylaxis> American Academy of Allergy, Asthma and Immunology website.*

I have reviewed the CMC Imaging Department Policy for assessing risk factors for adverse contrast reactions from iodinated nonionic low osmolality contrast agents for CT. I have weighed the risks and benefits of administering the contrast agent to the patient without premedication and have decided the administration of the contrast agent is necessary in order to obtain diagnostic imaging information that will materially affect and expedite necessary patient care and treatment.

Ordering Provider Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

The above information has been explained to me. The ordering physician has determined that the benefits of proceeding with the procedure outweigh the risks of administering the contrast agent without premedication and I understand the potential risks and benefits of proceeding without premedication. I agree to waive the recommended pretreatment.

Patient Signature: \_\_\_\_\_ Date / Time: \_\_\_\_\_

Representative / Relationship: \_\_\_\_\_ Date / Time: \_\_\_\_\_

Explanation by / Witness: \_\_\_\_\_ Date / Time: \_\_\_\_\_