

Pretreatment guidelines for patients with a history of CT IV contrast reactions*

RPC Approval: 2/17/2020

Next Review: 2/2022

Division/Champion: CT/Thoburn

Subject: Premedication Protocols Prior to Administration of Contrast Media.

Purpose: To minimize the risk of adverse reactions to contrast.

Policy:

1. Patients with a history of **mild** anaphylactoid reactions may be scanned using IV contrast during any shift. The patient should receive standard pretreatment medications (see section 3).

a. Symptoms of a mild anaphylactoid reaction include:

- i. Limited rash/ urticaria/ pruritis
- ii. Limited cutaneous edema
- iii. Limited “itchy”/“scratchy” throat
- iv. Nasal congestion
- v. Sneezing / conjunctivitis / rhinorrhea

2. Patients with a history of **moderate or severe** anaphylactoid reactions typically will not be scanned with IV contrast during evening/night shift **unless** the radiologist in charge has agreed, after a physician to physician conversation, that it would not be in the patients best interest to delay or not perform the scan with contrast. This conversation should be documented in the chart defining the risks, potential benefits as well as the lack of alternative imaging. The patient should receive standard pretreatment medications (see section 3). **Arrangements will need to be made for a member of the ordering service or an anesthesiologist to be present while the patient receives contrast, and during transport back to the floor/unit.**

a. Symptoms of a **moderate** anaphylactoid reaction include:

- i. Diffuse rash/ urticaria / pruritis
- ii. Diffuse erythema, stable vital signs
- iii. Facial edema without dyspnea
- iv. Throat tightness or hoarseness without dyspnea
- v. Wheezing / Bronchospasm

b. Symptoms of a **severe** anaphylactoid reaction include:

- i. Diffuse edema or facial swelling with dyspnea
- ii. Diffuse erythema with hypotension
- iii. Laryngeal edema with stridor and/or hypoxia
- iv. Wheezing / bronchospasm with hypoxia
- v. Anaphylactic shock (hypotension + tachycardia)

3. Appropriate premedication regime to mitigate against a recurrent anaphylactoid reaction, include.
- a. Elective Oral prep (13 hour prep)
 - Prednisone 50 mg PO at 13, 7 and 1 hr before contrast (**patients over the age of 8**)
 - Diphenhydramine (Benadryl) 50 mg PO 1 hr before contrast (**patients under the age of 12** should receive 25 mg of Diphenhydramine (Benadryl))
 - b. Elective IV prep (13 hour prep)
 - Hydrocortisone 200 mg IV at 13, 7 and 1 hr before contrast (**patients over the age of 8**)
 - Diphenhydramine (Benadryl) 50 mg IV/IM 1 hr before contrast (**patients under the age of 12** should receive 25 mg of Diphenhydramine (Benadryl))
 - c. Elective pediatric **patients under the age of 8 prep** (13 hour prep).
 - Prednisone 1 mg / kg (maximum dose of 50 mg) or the equivalent IV dose of methylprednisolone 13, 7 and 1 hours prior to the examination
 - d. Acceleratd IV prep (“4 hr rapid prep”)
 - Methylprednisolone sodium succinate (Solu-Medrol) 40 mg IV or hydrocortisone sodium succinate (Solu-Cortef) 200 mg IV immediately, **and** then every 4 hours until contrast medium administration, plus diphenhydramine (Benadryl) 50 mg IV 1 hour before contrast medium administration. **This regimen usually is 4-5 hours in duration.**
 - e. Premedication regimens less than 4 hours in duration (oral or IV) have not been shown to be effective. If iodinated contrast is required steroids are not recommended, given the small risk and no documented benefit. **Arrangements will need to been made for a member of the ordering service or an anesthesiologist to be present while the patient receives contrast, and during transport back to the floor/unit.**

Attachments: None

*These guidelines are based on UF Health Shands Hospital Core Policy RM 06-26