

Lakeshore Radiology Associates

Anticoagulation Guidelines for Percutaneous Image-Guided Interventions

Adapted from the ACR Manual on Contrast Media v10.2 2016. This ACR Manual covers the types and treatments of contrast reactions as well, the full PDF version available (as well as references) at :

https://www.acr.org/~media/ACR/Documents/PDF/QualitySafety/Resources/Contrast-Manual/2016_Contrast_Media.pdf?la=en

Specific Recommended Premedication Regimens

Several premedication regimens have been proposed to reduce the frequency and/or severity of reactions to contrast media.

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)

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.

Note: IV steroids have not been shown to be effective when administered less than 4 to 6 hours prior to contrast injection.

Changing the Contrast Agent to be Injected

In patients who have a prior, documented contrast reaction, the use of a different contrast agent, has been advocated and may sometimes be protective [36]. However, a change from one to another low-osmolality agent generally appears to provide little or no benefit [37]. An optional switch to a different agent may be combined with a pre-medication regimen.