Pre-Medication Regimen for Patients with a History of Prior Contrast Reaction

Contrast Reactions

- Described as anaphylactoid (all have features of anaphylaxis but are IgE negative in most cases)
  - Airway Obstruction
  - Angioedema
  - Cardiovascular Collapse
- Occur within 5-30 minutes.
- Incidence 0.4-4 in 10,000
- 6 fold increase in incidence with history of prior severe contrast reaction
- 6-10 fold increase in patients with asthma

ACR Recommendations for Premedication Regimen

- **ELECTIVE Premedication Administration Regimens**
  
  A. Prednisone 50mg PO at 13 hours, 7 hours, and 1 hour prior to contrast administration, with Benadryl 50mg PO 1 hour to contrast administration.
  
  OR
  
  B. Methylprednisolone 32mg PO 12 hours and 2 hours prior to contrast administration (+/- antihistamine).

- **EMERGENT Premedication Administration**
  
  1. Steroids are necessary 4-6 hours prior to contrast administration.
  
  2. Intravenous corticosteroid (e.g., 200mg hydrocortisone) should be administered every 4-6 hours prior to contrast administration, with an H-1 antihistamine (e.g., 50mg diphenhydramine) administered 1 hour prior to contrast administration.

- Severe reaction, even death may occur with premedication regimen.

- UF Health policy is to utilize the ACR recommended regimen when at all possible. In the absence of appropriate preparation, a non-contrasted exam may be performed to exclude organ injury and hematoma formation. Following the appropriate medication regimen, a contrasted exam may be performed for further evaluation. Alternative studies such as MR for dissection may be clinically useful.