

CONTRAST ALLERGY PREMEDICATION PROTOCOL

GENERAL COMMENTS

- The following circumstances increase the risk of an allergic-like reaction to contrast:
 - Patients with a prior reaction to similar contrast agent administered via the same route.
 - Patients with multiple allergies, particularly those resulting in severe reactions (i.e. anaphylaxis or laryngeal edema).
 - Patients with a history of asthma, particularly those experiencing an acute exacerbation.
- Premedication is required in patients with a history of allergic-like reactions to a contrast agent who are to receive the same agent or a similar agent via the same route.
- Premedication does not decrease the risk of a subsequent severe contrast reaction (such as anaphylaxis or laryngeal edema).
- Use of a different low/iso-osmolality iodinated IV contrast agent offers little to no reduction in risk of subsequent reaction.
- A history of allergy to shellfish does not infer an increased risk of reaction to iodinated IV contrast.
- A prior allergic-like reaction to iodinated IV contrast is not a contraindication to iodinated oral contrast administration.
- Use barium, CitraSelect or Volumen if a patient has had a prior reaction to iodinated oral contrast and has not been premedicated.
- A history of reaction to iodinated CT contrast does not increase the risk of reaction to gadolinium MR contrast (and vice versa).
- Steroids have not been shown to be effective in reducing the risk of allergic-like reactions when administered less than 4-6 hours prior to contrast administration.
- The risk of an allergic-like reaction or adverse reaction following the administration of low/iso-osmolar iodinated IV contrast is approximately 0.7% (7 in 1,000).
- The risk of a serious acute reaction following the administration of low/iso-osmolar iodinated IV contrast is approximately 0.04% (4 in 10,000).
- The risk of death following the administration of iodinated IV contrast is approximately 1 in 170,000.
- The risk of allergic-like reaction to gadolinium IV contrast is 0.004-0.7% (4-700 in 100,000).
- The risk of severe allergic-like reaction to gadolinium IV contrast is 0.001-0.01% (1-10 in 100,000).
- The risk of an adverse reaction to gadolinium IV contrast is 0.07-2.4% (7-240 in 10,000).

OUTPATIENT PREMEDICATION REGIMENS

- Option 1:
 - 50 mg prednisone PO at 13 hours, 7 hours and 1 hour prior to examination
 - 50 mg diphenhydramine (Benadryl) PO 1 hour prior to examination
- Option 2:
 - 32 mg methylprednisolone (Medrol) PO at 12 hours and 2 hours prior to examination
 - 50 mg diphenhydramine (Benadryl) PO 1 hour prior to examination
- Pediatric Patients:
 - 0.5 mg/kg prednisone PO at 13 hours, 7 hours and 1 hour prior to examination
 - 1.25 mg/kg diphenhydramine (Benadryl) PO 1 hour prior to examination
 - Appropriate IV doses may also be used in children.
- Can substitute another antihistamine by mouth if the patient is allergic to Benadryl or needs to drive himself/herself home – 10 mg cetirizine (Zyrtec) 1 hour prior to examination, 180 mg fexofenadine (Allegra) 2 hours prior to examination or 10 mg loratadine (Claritin) 2 hours prior to examination.

INPATIENT / ER PATIENT PREMEDICATION REGIMENS

- By Mouth Elective/Routine Exams (requires 13 hours):
 - 50 mg prednisone PO at 13 hours, 7 hours and 1 hour prior to examination
 - 50 mg diphenhydramine (Benadryl) PO 1 hour prior to examination
- Intravenous Elective/Routine Exams (requires 12 hours):
 - 8 mg dexamethasone (Decadron) IV at 12 hours and 2 hours prior to examination
 - 50 mg diphenhydramine (Benadryl) IV 1 hour prior to examination
- Urgent Exams (requires 4 hours):
 - 8 mg dexamethasone (Decadron) IV at 4 hours prior to examination
 - 50 mg diphenhydramine (Benadryl) IV 1 hour prior to examination
- Truly Emergent Exams (requires 1 hour):
 - 8 mg IV dexamethasone (Decadron) 1 hour prior to examination
 - 50 mg diphenhydramine (Benadryl) IV 1 hour prior to examination
- Consider decreasing diphenhydramine dose to 25 mg in patients over 65 years of age.
Can substitute 10 mg Zyrtec by mouth 1 hour prior to examination if the patient is allergic to Benadryl.