

## **MEDICAL EMERGENCY RESPONSE PLAN for Mast Cell Activation and Anaphylaxis:**

**If patients presents with flushing, rash, hives, swelling, abdominal pain, nausea, vomiting, shortness of breath, wheezing or hypotension, administer:**

- Benadryl (diphenhydramine, dye-free) 25mg (max 50mg) orally.
  - If unable to swallow or airway compromised, use preservative-free Benadryl IM or very slow IV push, diluted in normal saline over 2-5 minutes. Start at 25mg (max 50mg) and repeat every 4 hours, if needed.
- Solu-Medrol (methylprednisolone) 120mg (40mg for children under 12) IV/IM.
  - *Start at the lowest possible dose and monitor closely. I am sensitive to steroids and have never had them IV. My usual dose is oral Prednisone 6mg.*
- H2 antagonist, such as Famotidine IV.
  - *I have never had Famotidine or any H2 blocker by IV. I usually take oral Pepcid brand 20mg (no dye).*
- IV fluids, run as slowly as possible for the circumstances and, ideally, warmed to body temperature.
- Consider Hydroxyzine 25 mg (12.5 mg if age 2--12), orally every 2--4 hours.
  - *I have never had Hydroxyzine and don't know how I will react.*

**If the patient presents with anaphylaxis and/or acute hypotension, administer:**

- Epinephrine (preservative-free) 0.3 cc/ml of 1:1000 (1mg/1ml) solution = 0.2mg--0.3mg IM (Vastus Lateralis muscle).
  - If BP < 90 systolic, can repeat up to 3 times at 5--15 minute intervals, *however **my normal BP averages 85/55, so <90 is not an accurate marker for me.***
- Oxygen 100% by mask or nasal canula.
- Albuterol nebulization.

\*All mast cell patients must be monitored for biphasic (rebound) reactions.\*

Continuous diphenhydramine infusion (CDI) may be considered for severe mast cell activation and should be initiated at 5 mg/hour. This dose is lower than what would be expected to deliver a clinical response, but is suggested to ensure that the patient is not going to react to the brand of drug being administered (preservative-free is ideal). The dose can be escalated by 1--2 mg/hour. Titrate the infusion to the minimum dose rate which seems to provide the maximum benefit. Few patients respond to doses less than 10 mg/hour and the maximum recommended dose is 15 mg/hour in order to minimize the risk of anticholinergic toxicity.

### **Pre-medication for major and minor procedures:**

- Prednisone 50mg orally 24 hours and 1--2 hours prior to surgery (*I've never had more than 7mg*)
- Benadryl (diphenhydramine) 25--50mg orally, 1 hour prior to surgery
- Pepcid (famotidine) 20mg (no dye) orally, 1 hour prior to surgery
- Singulair (montelukast) 10mg orally (5mg for children under 12), 1 hour prior to surgery (*I've never had Singulair and do not use this step*)

**\*Note: my current premedication protocol is 25mg oral diphenhydramine (Benadryl brand dye-free capsules only), 20mg oral famotidine (Pepcid brand, without dye), 6mg oral Prednisone and 325mg acetaminophen (Tylenol brand, ideally). No artificial colorings in medications.\*\***

### **Drugs to be avoided:**

- Aspirin and non-steroidal anti-inflammatory (NSAIDS) medications
- Morphine, codeine derivatives
- Vancomycin