



Healthy Hydration to Minimize IVIG Side Effects

By Trudie Mitschang

FOR MANY patients treated with intravenous immune globulin (IVIG), infusion day is wrought with potential pitfalls due to a host of common side effects. While most side effects fall into the mild to moderate category, they can nonetheless be bothersome. Patients report symptoms that include headache, flushing, chills, myalgia, wheezing, tachycardia, lower back pain, nausea and hypotension. Headaches and migraines tend to be relatively common, both of which can be treated with antihistamines, nonsteroidal anti-inflammatory drugs and steroids, both before and after an infusion.

Apart from medication, healthcare providers agree that it's a good idea to stay well-hydrated before, during and after infusions, since adequate hydration has been proven to help alleviate many unwanted side effects of IVIG therapy. "We encourage patients to begin hydrating with nonalcoholic/noncaffeinated liquids several days prior to their infusion, during their infusion and a day or two after their infusion," says Leslie Vaughan, senior vice president of clinical programs at NuFACTOR Specialty Pharmacy. "We encourage them to try to follow the standard eight-by-eight rule: Consume eight 8-ounce glasses of water each day."

Water Versus Other Beverages

While medical professionals agree that water is the best choice when it comes to hydrating, there are many other options for those who find plain water to be somewhat "boring." Sports drinks such as Gatorade contain both water and valuable electrolytes like sodium and potassium. The downside of sports drinks is they can contain sweeteners and may not be a healthy choice for some patients, especially those who are diabetic. Still, if there are no contraindications and a sports drink encourages hydration, especially for a child who may not be getting enough fluids, it is still a preferable choice to not hydrating at all. Sports drinks may also be diluted with water to minimize sugar intake. "If someone wants to use a sports/electrolyte drink, I think it would be best to limit it to a small portion of their fluid consumption rather than the majority. Simple water does the trick," says Vaughan.

Another option for hydration that has fewer calories, less sodium and more potassium than a sports drink is coconut water. This increasingly popular beverage is low in calories, naturally fat- and cholesterol-free and has more potassium than four bananas. Coconut water has a sweet, nutty taste and contains easily digested carbohydrates in the form of sugar and electrolytes. It is a clear liquid that comes from the center of young, green coconuts. On

average, unflavored coconut water contains 5.45 calories, 1.3 grams of sugar, 61 mg of potassium and 5.45 mg of sodium per ounce, compared to Gatorade that has 6.25 calories, 1.75 grams of sugar, 3.75 mg of potassium and 13.75 mg of sodium.

Yet another option is fitness water. This cross between plain water and sports drink is popular. Products like Propel water are lightly flavored and infused with added vitamins and minerals. Although often sweetened, fitness waters contain fewer calories and electrolytes than sports drinks, but offer more taste than plain water. Again, if there are no contraindications, this is a good option.

When it comes to keeping young patients hydrated, Pedialyte is a popular choice because it quickly replaces fluid and electrolytes lost in children and infants. Pedialyte meets the requirements of the American Academy of Pediatrics Committee on Nutrition to help prevent dehydration and is lower in sugars than most sports drinks (100 calories per liter compared to approximately 200 calories in Gatorade). It does not contain sucrose, although flavored versions use the synthetic sweeteners sucralose and acesulfame potassium. While Pedialyte is marketed for children, it has been gaining popularity among adults as well.

In some instances, patients may require hydration during IVIG therapy. According to Vaughan, NuFACTOR typically recommends D5W hypotonic saline solution because it is the only solution compatible with IVIG and can run at the same time via a Y-site. Keep in mind that D5W is not recommended for diabetic patients. "If the doctor requests normal saline, the patient will need to have it before and/or after their IVIG, or it would need to be run through a separate IV line," says Vaughan.

A Case-by-Case Situation

Whether patients choose to hydrate with plain water, flavored or other hydration beverages, it's always a good idea to check with the doctor or infusion provider about each individual's unique situation. For example, sodium is not recommended for patients with congestive heart failure or high blood pressure, while diabetic patients should avoid beverages containing added sugar and sweeteners. "As pharmacists, we always take comorbidities into consideration," says Vaughan. "For example, we wouldn't recommend a lot of fluid for someone with concomitant heart failure or renal disease, which is why each case needs to be individually evaluated." ■

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Vita Coco 100% Pure Coconut Water

Vita Coco is pure vitamin and mineral-rich coconut water. It is a good source of potassium, fat and cholesterol-free water, and comes in eco- and socially-responsible Tetra Pak packaging with a resealable cap. Each bottle contains 11.1 ounces. \$17.99 (12-pack);

Amazon.com

Pedialyte Oral Electrolyte Maintenance Solution, Unflavored

Pedialyte is ready to use and requires no mixing or dilution. It contains balanced electrolytes to replace losses and provide maintenance requirements, as well as glucose to promote sodium and water absorption. Each bottle contains 33.8 ounces. \$4.99;

Target.com



Shopping Guide to Hydration



SALUS Infusion Water Bottle

This water bottle contains an infuser in which fruits and flavors such as strawberries, limes, melons, oranges, mint leaves, cinnamon sticks, etc., can be added to water or other beverages. It has a flip top, is U.S. Food and Drug Administration-approved and is made of BPA-free material. The bottle holds 25 ounces of liquid.

\$10.99;

Walmart.com



Propel Water

Each of Propel's nine flavors provides electrolytes while also providing vitamin B and antioxidant vitamins C and E. It contains no fruit juice and is naturally flavored. Each container has 16.9 ounces.

\$5.38 (12-pack);

Walmart.com



Gatorade Thirst Quencher Variety Pack

This variety has six each of fruit punch, lemon-lime and orange flavors. Each 12-ounce, 80-calorie bottle contains electrolytes and sugars for rehydration. \$8.68 (18-pack);

Walmart.com