# IVIG Infusion Guide: Tips to Make Infusion Days Easier

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f you or your family member receives intravenous immune globulin (IVIG) infusions, you know how the smallest thing can make treatment day difficult for the whole family. Whether the lack of a good connection with your infusion nurse or poor venous access, IVIG days can be dreaded events—but they don't have to be.

What follows are some tips for infusion days to aid in your endeavor to achieve the least traumatic experience possible. These "infusion gems" have led to a positive dialogue between patients, families and the rest of the healthcare team, and, consequently, have made infusions go more smoothly. We hope they do the same for you.

#### **IV** Access

First things first. Without adequate IV access, you or your family member will not be receiving the life-changing benefits of IVIG.

Ideally, you have access to an experienced infusion center where the nurses are trained, gentle and proficient. Many patients form a bond with the nurses whom they trust to get their IV access, and that relationship is a blessing. If you are not fortunate to have the best IV nurses in the world, you still can do a few small things to help the process have the greatest chance of success.

## Drink, Drink, Drink!

No, this is not a college fraternity game, but, in fact, adequate hydration is great advice for anyone who needs good IV access. Start drinking water, juice and power drinks the day before an infusion is scheduled. Stay away from coffee or alcohol as they can dehydrate the body. If you or your family member has a fluid limit, consult your healthcare team to determine how much fluid intake is acceptable. Similarly, if you have a heart or kidney condition, but do not have a fluid limit, discuss your hydration plan with your doctor.

Make it silly. If you are encouraging a child to drink, try fun, silly straws and fun cups. Popsicles are also a great way to let children have fun while trying to hydrate before an IV start.

#### A Less Painful Start

Numbing creams. If you or your family member has a fear of needles or a history of difficult IV starts, try using a numbing cream such as EMLA or Ela-Max. Place the cream on three or four sites that have been successful in the past, as the product packaging directs. Most creams work better if they are on for about an hour.

A word of caution about numbing creams: They can make the veins compress and flatten out due to the constriction effects from the active



ingredients, so if you or your family member has very difficult veins, numbing cream may not be a wise option for you.

*Warm and toasty.* If you or your family member has a history of difficult IV starts, ask for a warm pack to apply to the veins before anyone attempts a stick. The warmth causes a reaction called vasodilation, which can make the veins larger and easier to access.

#### **Infusion Dread**

IVIG days can be very scary for children, and it is important to try to make them the least traumatic as possible.

Sticker charts. If your child is 2 to 8 years old and receives IVIG, try a sticker chart for each infusion day completed. The child can help

make the chart, and many infusion centers have Child Life Specialists who are equipped with fun paper and cheerful stickers. Your child may enjoy the pride of placing the sticker on the chart each infusion, and at the end of a cycle, perhaps three or four treatments, you could give him or her a special treat. You know your child, and you can work together to find what special treat works best.

*Prizes.* Some infusion centers offer small presents or toys on infusion days. Most families find this works best if the child can choose the gift or receive the prize at the end of the infusion. This gives the child something to look forward to, and the regular routine is comforting.

Big kids. If an older offspring or adult or you are the patient, rewards still work. Use infusion time to indulge in a good book or watch a movie you never have time for. Bring a favorite blanket and take a long nap while you get your infusion. Use the time to nurture yourself as the IVIG nurtures your body. You deserve to feel special, because infusion days are stressful for big kids, too!

#### Rates of IVIG Infusion

The infusion rates recommended by most IVIG manufacturers comply with a standard of .5 cc per kilogram per hour of infusion (.5 cc/kg/hr). One kilogram equals 2.2 pounds. This rate usually doubles every 15 to 20 minutes, up to a maximum rate of 4 cc/kg/hr. This is important for you to know because an infusion administered too rapidly can increase potential reactions, and it can also increase the chances of a later reaction at the 24-to-36-hour mark.

Remember, the IVIG package insert rates are recommended, and

different institutions may have varied administration protocols. A word of caution: Do not exceed the recommended infusion rates unless specifically ordered to do so by your healthcare provider. It is generally safe to run IVIG at a slower infusion rate than the maximum for your weight.



If you have any questions about your infusion rate, talk with your healthcare team.

## Pre-medication

Most patients receiving IVIG require some form of pre-medication. "Pre-meds" are those medications given half an hour to an hour before infusion for the purpose of limiting any potential side effects.

The following are some, but by no means all, of the possible pre-meds for IVIG.

- Diphenhydramine (Benedryl)
- Acetominophen (Tylenol)
- Ibuprofen (Motrin)
- Naprosyn (Aleve)
- Prednisone
- Hydrocortisone
- Methylprednisolone (Solumedrol)
- Saline IV

Again, consult your healthcare team if you have any questions about pre-meds.

# Side Effects

There are many predictable side effects from IVIG infusions that are manageable with either pre- or post-medications—and some can be avoided altogether with proper communications and precautions.

Initially, be sure to alert your healthcare team if you or your family member has been ill, because illness may result in side effects being more pronounced, and this can alter the pre-medications needed. Even if it seems like "just a small cold," let the healthcare team know before starting the infusion.

If there is pain or discomfort at the site during infusion, always alert the infusion nurse immediately. Sometimes a warm or cold compress on the site of infusion can help. If all else fails, you can ask the IV nurse to look for IV access in your arm rather than in your hand, as the larger arm vein can be far less sensitive than the smaller and more delicate hand veins.

If you or your family member is suffering from serious side effects after IVIG infusions, such as migraines, back pain, vomiting or listlessness, there are some possible solutions you can discuss with your healthcare team:

- Slowing down the rate of infusion
- Changing brands of IVIG
- Switching to subcutaneous infusion (under the skin)
- Infusing normal saline fluid after IVIG

# Nothing to Fear but Fear Itself

A few words on fear and anxiety: If your child is receiving the infusion, and you are exhibiting signs of fear and anxiety, it will make your child more concerned than if you remain calm.

This may seem a tall order when your child is experiencing a scary and possibly painful procedure, but they will pick up your energy. If you are unsure of what to do, talk with the healthcare staff, and they can support you and your child. Ask about having a Child Life Specialist work with your child before and during the IV start. Some families create a photo journal or teaching book, so children can read about their infusions the day before they arrive. Encourage your child to ask a lot of questions before the procedure, so he or she understands what will occur. Remind the child that the staff is there to help him or her feel better. and remember to use rewards to help get through the day.

#### Subcutaneous Immune Globulin

A quick note about subcutaneous immune globulin (SCIG) infusions: Numbing cream on the site or sites you and your healthcare team have selected can help alleviate the discomfort some patients feel with SCIG infusion. Your physician can prescribe the cream for you. You may choose to stop using the cream for subsequent infusions, if you no longer need it. You should remove the SCIG from the refrigerator one hour before you start the infusion, so it returns to room temperature before you infuse.

During the first 15 to 30 minutes of infusion, a warm pack or cold pack may help with the burning at the site of infusion that some

patients experience. Because the SCIG dose is smaller, the rate of infusion is more flexible than with the IV formulation, so discuss the best rate with your healthcare team. If there is a great deal of itching at the infusion site, also talk with your team about an anti-itching medication such as Benadryl.

# **Logging Infusions**

If is very important to maintain an infusion log. Your or your family member's infusion log should include the following information for every infusion:

- Date and time of your infusion
- Dose infused
- Immune globulin product name
- Product lot number with expiration date
- Location of infusion site(s)
- Infusion duration
- Any infusion site reactions or side effects

You can find your product lot number sticker on the vial or you can copy down the product name, lot number and expiration date from the vial into your log.

#### Ask Questions!

These infusion tips are a way to increase dialogue between you, your family member and the rest of your healthcare team. Undergoing infusions can be a very scary experience, but the more information you have, the better prepared you will be to help fix any problems that arise. Always ask if you are unsure of something, and remember that the members of your healthcare team are there to assist you and your family in achieving a healthier way of life.

# Cheat Sheet for IVIG Infusions

- Drink a lot of liquids for one to two days before infusion day, but stay away from coffee and alcohol.
- Ask for numbing cream, if you feel you need it.
- If there are side effects, ask about pre-medication or decreasing the rate of infusion.
- Do not exceed the 4 cc/kg/hour infusion rate, unless directed by your physician.
- Write down any questions and keep a journal to log infusions, pre-medications, lot numbers and any side effects.
- Try to make the best of infusion days, because they will make the patient feel better!