



Intravenous Therapy and Intramuscular Injections Rationale

What is Intravenous Therapy or Intramuscular Injection?

Most patients understand taking oral vitamins and minerals either preventatively or in the face of disease. However, often by the time symptoms of disease have appeared, we are past a point where oral vitamins and minerals alone are effective.

By providing these substances through intravenous or intramuscular injection we bypass the liver and digestive system and deliver them directly to targeted tissues and cells. This type of delivery is called parenteral and involves administering a nutrient, medication or substance in a route other than the mouth.

Our body is composed of billions of cells that all need nutrients for proper function. In a healthy cell these nutrients are appropriately absorbed through a semipermeable cell membrane. In an unhealthy or sick cell this absorption is often decreased. In addition to this poor absorption, cells that are fighting off disease often require higher levels of nutrients in order to function optimally.

By providing substances intravenously we can increase the concentration outside of the cell and promote the cell to absorb more nutrients. Once the cell has absorbed these nutrients it is better equipped to function and fight off disease. Nutrients provided intravenously are especially useful in cases where patients have poor oral absorption and digestive function.

Brief Advantages and Disadvantages of IV Therapy

Advantages

- Easy access to rapid administration of solutions
- Continuous or intermittent administration of nutrients
- Bypasses absorption loss in liver and digestive systems Easy to monitor delivery of fluids, electrolytes and nutrients

Disadvantages

- Mildly invasive procedure that can cause infection, bleeding, local discomfort and bruising
- More costly than oral, intramuscular or sublingual substances

Myers' Cocktail Push

The Myers Cocktail is an example of a type of intravenous (IV) push. It is based on the work of the late John Myers, MD who used this vitamin-and-mineral formula to treat a wide range of medical conditions. The IVP usually consists of magnesium, calcium, B vitamins and Vitamin C. This treatment temporarily increases nutrient levels in the bloodstream and can increase cellular uptake.

We have seen many conditions respond to IVP including:

- Migraines
- Chronic depression
- Cardiovascular disease
- Acute asthma attacks, lung disease, chronic allergies and upper respiratory tract infections
- Ulcerative colitis, Crohn's disease, Celiac and IBS patients can receive additional nutrient support
- Fibromyalgia, chronic fatigue and rheumatoid arthritis patients can experience more energy and less symptoms
- Persistent infections and patients with low immunity can find increased immune response with less susceptibility to acute viral or bacterial illness

The IVP nutrients are drawn into a syringe and diluted appropriately to 20-30 mL. A pediatric sized needle is inserted into a vein and the injection is given slowly at 1-2 cc (mL) per minute. Side effects are rare and are almost always limited to local irritation of the vein.

The most common sensations are heat and flushing (due to the magnesium in solution), and the taste of B-vitamins. These sensations generally occur soon after the injection is started. IVP are usually given 1-2 times per week and beneficial effects are usually felt by the fourth injection.

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Many patients with chronic conditions choose to continue IVP every 1-4 weeks or when they feel a decrease in energy or return of symptoms.

Intravenous Push

The IVP nutrients are drawn into a syringe and diluted. Depending on what substance is being administered, the volume in the syringe may vary from around 6cc-30cc. A pediatric sized needle is inserted into a vein and the injection is given slowly at 1-2 cc (mL) per minute. Side effects are rare and are almost always limited to local irritation of the vein or a small bruise following the injection.

Intravenous Drip

The intravenous drip nutrients are drawn into a bag filled with a sterile solution (sterile water, saline, or dextrose solution). A small gauge catheter is inserted into the vein and attached to the bag via sterile tubing. The nutrients are then infused, generally at a rate of 2-4 cc (mL) per minute. Side effects depend on the ingredients of the intravenous drip and will be discussed by your doctor. Generally, side effects are rare and are often limited to local irritation of the vein.

Intramuscular Injections

Nutrients are drawn into a small syringe, usually to a volume of 1-2cc (mL). The lab technician will discuss injection location options; generally we choose the gluteus muscle as it is a large muscle with ample blood supply. Additionally, we have noticed it to be more comfortable than other locations. The nutrients will be injected in the gluteus muscle and the entire visit will take around 5 minutes. Generally, side effects are rare and limited to local irritation or bruising.

Side Effects

Adverse effects are individual to IV type. Most commonly experienced with any IV are:

Common

- Bruising at IV access site
- Fatigue
- Headache

Rare

- Allergic reaction
- Dizziness
- Nausea
- Edema

Patient Prep

Please arrive on time and well-hydrated. Please ensure that you have eaten prior to the intravenous treatment.

Please inform a lab technician and/or your doctor if you have an allergy or sensitivity to shellfish or sulphur containing foods; any other known allergies; have a history of any reaction to intravenous treatment; are pregnant or breastfeeding; are taking blood sugar lowering medications, thyroid medications, or cancer medications; or have any concerns regarding this treatment. Please consult with your ND if your condition worsens.

Please consult with your ND if your condition persists or worsens.

Notes
