FAQ

Intravenous Vitamin C

**What is high-dose vitamin C?**

Vitamin C is a nutrient that is found in food, such as oranges, grapefruit, papaya, peppers, and kale, or in dietary supplements. Vitamin C is an antioxidant and helps prevent damage to cells caused by free radicals. It also works with enzymes to play a key role in making collagen. Vitamin C is also called L-ascorbic acid or ascorbate.

**Does IV vitamin therapy hurt?**

Patients may experience slight discomfort at the injection site, but this discomfort can be relieved through the simple use of cold compresses. During the therapy itself, patients will only need to relax and let their body’s natural healing process take over.

**How many IV vitamin therapy treatments will be required?**

Each patient is different, and some patients may require more treatment sessions than others. A thorough consultation with our expert staff will allow us to determine your particular needs regarding IV recovery treatments.

**How is high-dose vitamin C given or taken?**

Vitamin C may be given by IV infusion or taken by mouth. Much higher blood levels are reached when vitamin C is given intravenously. When given by intravenous (IV) infusion, vitamin C can reach higher levels in the blood than when it is taken by mouth.

**Have any laboratory or animal studies been done using high-dose vitamin C?**

In laboratory studies, tumor cells are used to test a substance to find out if it is likely to have any anticancer effects. In animal studies, tests are done to see if a drug, procedure, or treatment is safe and effective. Laboratory and animal studies are done in animals before a substance is tested in people.

**Have any studies of high-dose vitamin C been done in people?**

Several studies of high-dose vitamin C given alone or in combination with other drugs in patients with cancer include the following:

**What Are the Side Effects and Risks of High-Dose Vitamin C?**

Intravenous high-dose ascorbic acid has caused very few side effects in clinical trials. However, high-dose vitamin C may be harmful in patients with certain risk factors.

In patients with a history of kidney disorders, kidney failure has been reported after ascorbic acid treatment. Patients with a tendency to develop kidney stones should not be treated with high-dose vitamin C.

Case reports have shown that patients with an inherited disorder called G-6-PD deficiency should not be given high doses of vitamin C, due to the risk of hemolysis (a condition in which red blood cells are destroyed).

Since vitamin C may make iron more easily absorbed and used by the body, high doses of the vitamin are not recommended for patients with hemochromatosis (a condition in which the body takes up and stores more iron than it needs).

**What are the Positive Effects of Intravenous Vitamin C?**

* Correction of any possible vitamin C deficiency (i.e. fatigue, bleeding)
* Immune-modulation (enhance or calm down)
* Cytotoxic to cancer (chemotherapeutic potential)
* Support white blood cells (they have 10-30x higher levels than the blood)
* Stimulation of collagen formation (wall off tumors)
* Inhibition of hyaluronidase (prevent cancer spread)
* Enhanced wound healing after surgeries, biopsies
* Enhanced benefits of chemotherapy and radiation
* Support the bone marrow and especially the platelets
* Anti-inflammatory
* Anti-stress and Anti-depressant properties

**Precautions:**

* Localized pain at the infusion site can occur if the infusion rate is too high or the pH too low.  This is easily corrected by either slowing the rate or adjusting the formula.
* Vitamin C may decrease the levels of calcium, chloride, and potassium and as a consequence some patients may experience shakiness or ache.  This is treated by further adjusting the formula with those ingredients.
* Given the amount of fluid and sodium that is used as the carrier for vitamin C, any condition which could be affected by the increased fluid load (i.e. congestive heart failure, ascites, edema, pleural effusion, etc.) needs to be monitored more closely and a tailored protocol  given accordingly.
* IVC may be dehydrating and cause a temporary lowering of blood sugar, and so proper hydration and nourishment needs to be emphasized prior to each treatment and following
* As with any intravenous injection, infiltration or vein irritation is always possible