

Intravenous (IV) therapy is the injection of nutrients (i.e. vitamins, minerals, or amino acids) into the veins, by passing the digestive system, thereby this therapy guaranteeing significant delivery of nutrients to the cells. Those nutrients in safe dosage range not only for nourishing the cells but to facilitate the body to heal better.

Benefits of IV Therapy :

- Supplies essential nutrients in patients with absorption problems
- Stimulates immune system to function better
- Improves circulation and unblocks arteries
- Decreases aches and pains
- Increases cellular detoxification
- Increases body's ability to heal (ie Sports Injury Recovery)
- Improve athletes performance
- Hinder cancer cell growth and spread

Several Indications for IV Therapy are ;

- Cancer
- Viral infections
- Colds or Flu
- Hepatitis
- Chronic systemic candida
- Epstein Barr virus
- Bell's palsy
- HIV/AIDS
- Malnutrition/Malabsorption
- Crohn's disease
- Celiac disease
- Ulcerative colitis
- Alzheimer's disease
- Cardiovascular diseases
- Arrhythmias
- Multiple Sclerosis
- Parkinson's disease
- Rheumatoid arthritis
- Fibromyalgia
- Sports Injury
- Restless Leg Syndrome

Vitamin C - IV Therapy

There are many studies that look at vitamin C and its effects on cancer in a tissue culture. The concentrations of vitamin C used against cancer in tissue culture is achievable only with intravenous therapy. One study in the Journal of the National Academy of Sciences in 2008 reported on an experiment that showed that such high intravenous levels could reduce tumor volumes by 41-53%. This requires an intravenous dose of 60-75 grams (65000 - 75000 mg) per IV. In addition, high doses of Vitamin C therapy also significantly reduces fatigue, nausea, pain, and appetite loss.

Precautions

Intravenous therapy of high doses of vitamin C has an excellent safety record.

The risks, as with any intravenous procedure, include infection, clotting and loss of the vein, infiltration (leakage) of fluid into the tissues around the needle site, bruising, and occasionally pain in arm. These are very rare.

General Information

Vitamin C intravenous therapy can be utilized in conjunction with Chemotherapy and Radiation. There are studies that shows certain anti-oxidants favourably enhances chemotherapy drugs effects.

Lab Test : There are a few lab test that needed to be done to determine patient's eligibility to for the treatment : **serum G-6-PD**, kidney function test (eGFR), serum electrolyte level.

Things to do before each treatment :

1. Drink lots of water before each IV Therapy session
2. Eat your meal before having the treatment
3. Do not lift heavy weights or do vigorous exercise after the treatment

Duration : Each treatment varies between 1-3 hours in duration

IV Therapy Cancer Treatment Schedule

Session 1 & 2 25 g Vitamin C in a week

Session 3 & 4 50g Vitamin C 2-3x per week

Evidence for Vitamin C Intravenous Therapy for cancer support

“...intravenous administration of the same dose produces plasma concentrations about 25-fold higher. Larger doses (50-100 g) given intravenously may result in plasma concentrations of about 14,000 micromol/L. At concentrations above 1000 micromol/L, vitamin C is toxic to some cancer cells but not to normal cells in vitro. We found 3 well-documented cases of advanced cancers, confirmed by histopathologic review, where patients had unexpectedly long survival times after receiving high-dose intravenous vitamin C therapy. We examined clinical details of each case in accordance with National Cancer Institute (NCI) Best Case Series guidelines. Tumour pathology was verified by pathologists at the NCI who were unaware of diagnosis or treatment. In light of recent clinical pharmacokinetic findings and in vitro evidence of anti-tumour mechanisms, these case reports indicate that the role of high-dose intravenous vitamin C therapy in cancer treatment should be reassessed.”
[Padayatty SJ, Riordan HD, Hewitt SM, Katz A, Hoffer LJ, Levine M. Intravenously administered vitamin C as cancer therapy: three cases. *Canadian Medical Association Journal \(CMAJ\)*. 2006 Mar 28;174\(7\):937-42.](#)

“ The antioxidant perhaps most widely used in complementary oncology is vitamin C, particularly by intravenous injection. In light of the recent clinical pharmacokinetic findings, the in vitro evidence of anti-tumour mechanisms and some well-documented cases of advanced cancers the role of high-dose intravenous vitamin C therapy in cancer treatment should be reassessed. High dose intravenous vitamin C therapy may have benefits in patients with advanced cancers, and cancers with poor prognosis and limited therapeutic options, but further clinical studies regarding the safety and efficacy of this therapy are necessary, especially in Germany”

[Gröber U. Vitamin C in complementary oncology--update 2009 *Med Monatsschr Pharm*. 2009 Jul;32\(7\):263-7.](#)

“Ascorbic acid is an essential nutrient commonly regarded as an antioxidant. In this study, we showed that ascorbate at pharmacologic concentrations was a prooxidant, generating hydrogen-peroxide-dependent cytotoxicity toward a variety of cancer cells in vitro without adversely affecting normal cells. To test this action in vivo, normal oral tight control was bypassed by parenteral ascorbate administration. Real-time microdialysis sampling in mice bearing glioblastoma xenografts showed that a single pharmacologic dose of ascorbate produced sustained ascorbate radical and hydrogen peroxide formation selectively within interstitial fluids of tumors but not in blood. Moreover, a regimen of daily pharmacologic ascorbate treatment significantly decreased growth rates of ovarian ($P < 0.005$), pancreatic ($P < 0.05$), and glioblastoma ($P < 0.001$) tumors established in mice. Similar pharmacologic concentrations were readily achieved in humans given ascorbate intravenously. These data suggest that ascorbate as a prodrug may have benefits in cancers with poor prognosis and limited therapeutic options.”

[Chen Q, Espey MG, Sun AY, Pooput C, Kirk KL, Krishna MC, Khosh DB, Drisko J, Levine M. Pharmacologic doses of ascorbate act as a prooxidant and decrease growth of aggressive tumor xenografts in mice *Proc Natl Acad Sci U S A*. 2008 Aug 12;105\(32\):11105-9. Epub 2008 Aug 4.](#)

“To test the carcinostatic effects of ascorbic acid, we challenged the mice of seven experimental groups with 1.7×10^{-4} mol high dose concentration ascorbic acid after intraperitoneal administrating them with sarcoma S-180 cells. The survival rate was increased by 20% in the group that received high dose concentration ascorbic acid, compared to the control. The highest survival rate was observed in the group in which 1.7×10^{-4} mol ascorbic acid had been continuously injected before and after the induction of cancer cells, rather than just after the induction of cancer cells. The expression of three angiogenesis-related genes was inhibited by 0.3 times in bFGF, 7 times in VEGF and 4 times in MMP2 of the groups with higher survival rates. Biopsy Results, gene expression studies, and wound healing analysis in vivo and in vitro suggested that the carcinostatic effect induced by high dose concentration ascorbic acid occurred through inhibition of angiogenesis.”

[Yeom CH, Lee G, Park JH, Yu J, Park S, Yi SY, Lee HR, Hong YS, Yang J, Lee S. High dose concentration administration of ascorbic acid inhibits tumor growth in BALB/C mice implanted with sarcoma 180 cancer cells via the restriction of angiogenesis. *J Transl Med*. 2009 Aug 11;7:70.](#)

Price Schedule

Intravenous Treatment : \$125

Includes

Vitamin C	25 gram
Vitamin B complex	
Vitamin B12	2000mcg
Zinc	5mg
Selenium	200mcg
Magnesium	600mg
Saline 0.9%	250ml
Glutathione	
Diluted HCL	

Note that additional amount of nutrient will be added according to patient's need at no extra cost.

Each additional 25 gram Vitamin C is: \$25

Vitamin B12 (5000mcg) Injections : \$25 +HST

Glutathione (600mg) IV Injections : \$25 + HST (plus additional Naturopathic Visit cost)

Mistletoe Injection (Iscador) \$110 +HST (series of 7 treatment).

Glutathione Nebulizing Inhalation Therapy : \$15+HST

Comprehensive Lab Test Package :

Kidney function test (eGFR), CBC and serum G-6-PD \$55