

VITAMIN C IN HIGH DOSAGES

PROVIDES SIGNIFICANT PAIN RELIEF

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The day before Thanksgiving I had a cornea transplant. When the local began to wear off, it became obvious that it was going to be painful. I began taking 12 grams of ascorbic acid orally every 15 minutes. By the time I reached 72 grams, there was absolutely no pain.

I continued to take 8 to 12 grams an hour that evening and the following day. There was no pain.

Thanksgiving, I returned for a follow-up visit. There had been 2 cases of corneal transplant done the day before. There were no nurses in that day so the doctor came in to do the follow-up by himself. He called both of us in at the same time. As we were walking down the hall together, he asked me if I had pain, I told him about the 72 grams of ascorbate (vitamin C) and told him there was no pain. He asked the other patient the same thing and he replied that it had hurt terribly the night before and still hurt terribly.

Subsequently, the eye incision healed rapidly and there was not pain. The corneal edema, which was the reason for the operation, was due to an old style cataract operation where the lens was placed anterior to the iris and just behind the cornea. (The more modern method is to place the lens posterior to the iris.) Anyway, it was a Leiske lens and a common complication is that it somehow damages the endothelium of the cornea. The cornea grows from the inside out. As little pockets of damaged cells grow toward the surface, it results in corneal edema and corneal ulcers.)

The reason that ascorbate (only in very high doses) is such a good pain killer is because the pain is mediated by free radicals and if there are no free radicals, there is no pain. The important thing to remember is that the ascorbate has to be forced into the tissues involved in very high concentrations before the ascorbate has this pain killing effect.

More recently, I tripped over my dog and hit the concrete with my right eyebrow. This tore open the skin and required 8 stitches. Also there was a partial tear of the supraorbital nerve. While in the ER at Stanford, the young lady physician was beginning to inject some local anesthetic. I knew she was going to send me for an Xray to see if there was any foreign body or fracture of the skull. I told her that she better hurry because the local anesthetic was going to wear off rapidly. She said not to worry because she was using a long-acting local anesthetic. I told her it would wear off rapidly because I had taken some vitamin C. She approved because she took vitamin C herself. I asked her how much and she said, "One gram a day." I told her that I had taken 36 grams in the two

hours since the injury. She said, "You must be kidding." Anyway after the Xray, the anesthetic had worn off but since she was using 6-0 sutures which are very small, I bit the bullet and didn't say anything. Afterward, I continued to take 12 grams of ascorbic acid an hour and the pain vanished. I never did take any of the pain medicines I was prescribed. The next morning the wound was itching. It rapidly healed without any difficulty.

- *Robert Cathcart, MD*

1. Reduced pain from osteoarthritis in hip joint or knee joint during treatment with calcium ascorbate. A randomized, placebo-controlled cross-over trial in general practice

Jensen, Niels Hertz

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INTRODUCTION: Although vitamin C is essential for the formation of collagen and proteoglycan and has been shown to minimise surgically induced arthritis in guinea pigs, no controlled trial has examined its effect on human osteoarthritis. **MATERIAL AND METHODS:** The trial was a multicenter, double-blind, randomised, placebo-controlled, crossover-trial performed by ten general practitioners. The Declaration of Helsinki and the European guidelines for good clinical practice were strictly followed. One hundred and thirty-three patients with radiographically verified symptomatic osteoarthritis of the hip joints and/or the knee joints were treated with one gram of calcium ascorbate or identically looking placebo tablets. The calcium ascorbate tablets and the placebo tablets should be swallowed daily for 14 +/- 3 days respectively, separated by 7 +/- 3 days wash out. The main outcome measure was difference on the 100 mm visual analog scale (VAS) score for pain in a preselected joint.

The secondary outcomes were Lequesne score for function and patient preference.

RESULTS: Calculated on an intention-to-treat principle, calcium ascorbate reduced pain significantly compared to placebo ($p = 0.0078$ by analysis of variance between groups (ANOVA) for difference in VAS, mean difference 4.6 mm (95% CI 1.2-8.0). Similar superiority was found for Lequesne index ($p = 0.036$, difference 0.56 (95% CI 0.04-1.08) and for patient preference ($p = 0.012$). **DISCUSSION:** The demonstrated effect is less than half as pronounced as commonly reported for NSAID etc. If the finding can be reproduced with a smaller, acceptable intake of vitamin C this would be of importance considering the large prevalence of osteoarthritis.

2. Double-blind comparison of acetylsalicylic acid alone and plus ascorbic acid and glucuronamide for analgesic effect in patients with chronic rheumatic disease

Simon, F.

JOURNAL NAME *Gazette Medicale*

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LANGUAGE FRENCH

marked relief of bone pain in 62% of the patients receiving a combination of ascorbic acid and calcitonin- compared with 36% of the patients receiving pain relief with calcitonin alone.

3. Combined therapy with ascorbic acid and calcitonin for the relief of bone pain in Paget's disease

Smethurst, M.; Basu, T. K.; Gillett, M. B.; et, al.

JOURNAL NAME Acta Vitaminologica et Enzymologica

PUBLICATION DATE 1981

In a short trial, 24 patients with Paget's disease of the bone were treated for 2 weeks with either ascorbic acid and calcitonin in combination, or with calcitonin alone. Pain relief was then assessed subjectively by the patients and classified as nil, some, or a marked reduction in pain . There were 11 patients in the group on combined therapy and 73% of them experienced pain relief, compared with 85% of the 13 patients in the group on calcitonin alone. In the patients who experienced pain relief, however, 62% of those on the ascorbic acid and calcitonin combination claimed a marked relief of pain compared with only 36% of the patients who responded to calcitonin alone. These results indicate that when calcitonin and ascorbic acid are used in combination they may provide an increase in the extent of pain relief, but do not increase the total proportion of patients actually obtaining relief.