



The Many Applications of the Rapid Intravenous Magnesium Push

- The “rapid magnesium IV push” can relieve nearly any acute pain caused by muscle spasm
- Angina, migraine, asthmatic wheezing, Reynaud’s syndrome, menstrual cramping, food “sticking in the esophagus,” back muscle spasm, “stuck” kidney stone, intestinal spasm—all can be relieved
 - Why does the “rapid IV push” work when other means of using magnesium fail?
 - Why should you know about this?

Vitamins, minerals, amino acids, and other nutrients and natural substances are given intravenously (IV) for many reasons: to make up for poor nutrient digestion or absorption; to more rapidly eliminate infections; to detoxify from food poisoning; as a major assist to cancer therapy; and much, much more. All of these IV infusions are “dripped in” from IV bottles or bags which usually contain between seven and thirteen ounces of fluid and usually take between 30 to 90 minutes to complete.

But there is one very small—¾ ounce—IV infusion that works much better if it’s “pushed in” as rapidly as possible! Its very many uses are applied frequently in the Tahoma Clinic. There are some other unique aspects to this “IV push” too. For example, those receiving this IV are encouraged to push it in themselves (under supervision of an experienced physician or IV technician, of course), and yes, as rapidly as they can! And the results are most often felt right away.

What is this IV? What can it do? Why the emphasis on “rapid push”? And why might you want to read about it at all, since you can take magnesium at home as a supplement, and your physician can tell

you about it and give you this IV if it’s really needed?

An answer for this last question first: if we’re going to be as healthy as we can for as long as we can, we need to be aware of as many safe, natural therapies as possible—even if we can’t do them ourselves—just in case they’re ever needed!

A series of these injections will usually lessen and often completely eliminate recurrent spasms.

Of course the rapid IV magnesium push contains magnesium (combined with sulfate), which is responsible for most of the results, along with vitamin B6 (which helps optimize magnesium action), and a very weak salt water (saline) solution. Even though there are three ingredients, this IV is usually called “the rapid IV magnesium push.” Administered rapidly, what this magnesium-containing IV push can do is very impressive! Let’s start with:

Angina Pectoris

Translated into English it means “heart pain.” It’s very frequently termed just “angina.” Most angina “attacks” result from

muscle spasm (“constriction”) of the coronary arteries. Magnesium and vitamin B6 given through rapid IV frequently relieves acute angina; the initial IV sometimes needs immediate repetition to complete the angina relief.

A series of these IVs—given daily if necessary—often eliminate angina completely, and at worst significantly lessen the frequency and severity of attacks. An example: A few years ago, a woman from Eastern Washington (on the other side of the mountains from where we’re located in the Western—and much more politically correct—side of Washington State) called us at Tahoma Clinic reporting that she’d been diagnosed with angina pectoris and told she “didn’t need surgery yet.” She’d been told that “in the meantime” she should use nitroglycerin tablets when she had chest pain. Her call was to ask if there was something more natural and healthier for her to use.

We told her there was (and of course, still is) but that it might take a few weeks for full effect. She could stay in our area for that time, or perhaps find a physician locally who would continue the treatment if she needed to return home sooner. She said she’d be staying with her son (whose home was in the Seattle area) for “as long as it takes.”

She was given the rapid IV magnesium push every day (Monday–Friday) the first week, then three times weekly for the next two weeks. During the first two weeks the severity of the “angina attacks” steadily

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Green Medicine is dedicated to helping you keep yourself and your family healthy by the safest and most effective means possible. Every month, you'll get information about diet, vitamins, minerals, herbs, natural hormones, natural energies, and other substances and techniques to prevent and heal illness, while prolonging your healthy life span.

A graduate of Harvard University and the University of Michigan Medical School (1969), Dr. Jonathan V. Wright has been practicing natural and nutritional medicine since 1973 at the Tahoma Clinic, now in Tukwila, Washington. Based on enormous volumes of library and clinical research, along with tens of thousands of clinical consultations, he is exceptionally well qualified to bring you a unique blending of the most up-to-date information and the best and still most effective natural therapies developed by preceding generations.

In 1992, Dr. Wright was among the original founders of the American Preventive Medical Association—now known as the Alliance for Natural Health USA—which was created to defend integrative doctors from relentless and coordinated attacks from the conventional medical establishment and the government agencies that protect them. Now one of the leading voices in natural health policy, the Alliance for Natural Health USA continues this mission by organizing half a million grassroots activists to protect access to natural, preventive medicine.

Dr. Wright and ANH-USA are proud to be teaming up once again to empower consumers to exercise their inalienable rights to choose their own healthcare, and to warn the public of continual, pervasive attempts from both government and private organizations to restrict them.

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declined; she had no more of them during the third week, so she left for home with a page of instructions that her local physician agreed to use—if necessary—if the attacks returned.

Months later, her husband had his own appointment at Tahoma Clinic. At that time she told us she'd continued taking the magnesium supplement that been advised when she left after the IV series, and she'd had no further angina "attacks."

Why the rapid IV magnesium pushes were needed initially but could later be replaced by an oral supplement is explained towards the end of this article. Before that, we'll review some of the outstanding results in treating angina and preventing deaths from cardiovascular disease reported in medical journals.

IV magnesium treatment of angina and cardiovascular disease was first reported by a South African physician^{1,2} in 1956 and 1958, and an Australian physician in 1959! From the 1958 report:

In patients with coronary heart disease and angina, an appreciable number respond to parenteral [injected] administration of magnesium sulphate, sometimes in a dramatic and almost unbelievable manner, and this after all conventional and accepted methods of therapy had failed and sufferers had lost hope of ever obtaining relief. The magnesium, injected intravenously or intramuscularly, did more than relieve angina!

The report continues:

64 patients with documented myocardial infarction or acute coronary insufficiency were also treated with magnesium injections. Of these, only 1 died within 4–6 weeks of the attack (1.6% mortality), while the average mortality reported by others for patients receiving conventional therapy was 19–50%. In acute cases, early administration of parenteral [IV] magnesium is important.

The 1959 report³ was about individuals with angina and/or atherosclerosis. In addition to relieving angina, the most dramatic effect of the magnesium injections was on cardiovascular mortality:

More than 100 patients with coronary heart disease . . . of whom at least 1/3 had suffered an acute myocardial infarction, were treated with intramuscular magnesium sulfate (500–1000 mg every 5 days for 12 injections). Only one death occurred (1% mortality rate).

These results were compared to those of the previous year: of 196 hospitalized patients treated with anticoagulants but no magnesium sulfate, there were 60 deaths (about a 30% mortality rate). The effects of magnesium therapy did not appear to be permanent; a maintenance dose of 1 g every 2 weeks for 6 months appeared to be necessary. Oral magnesium sulfate appeared to be ineffective.

The magnesium injections given by this physician were given intramuscularly (IM), not IV; the quantities used were much greater than the rapid IV magnesium push. The results were striking: a 1% mortality rate with magnesium, a 30.6% mortality rate without it! And don't forget the reduction in mortality in the 1958 report: 1.6% in those given injectable magnesium versus 19–50% in those "receiving conventional therapy."

At least four other groups of researchers^{4–7} reported very similar results from intravenous magnesium therapy in 1985, 1986, 1990, and 1992. All four reported very significant decrease in cardiovascular mortality in those receiving magnesium injections as compared with those not receiving them. Two of these reports showed another beneficial effect of intravenous magnesium: a very significant decline in heartbeat irregularities ("cardiac

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For Erectile Dysfunction Treatment, See Your Dentist?

- Chronic periodontal disease can contribute to ED
- Chronic periodontal disease treatment may improve ED

No kidding! All but one of many PubMed research abstracts that mention the relationship of erectile dysfunction (ED) to chronic periodontal disease actually suggest that periodontal disease is causative! So if things still aren't working optimally despite all the things you've tried, it might be time to consider seeing your dentist, or maybe a periodontal specialist.

The periodontitis and ED connection is a relatively recent one. The first PubMed abstract on this topic is dated 2009. It concludes tentatively: "ED might be associated with chronic periodontal disease."¹

The next two publication abstracts listed are dated 2011. In the first, seventy young men (mean age 35.3 years) with ED were studied. The authors reported that those with severe ED were most likely to have chronic periodontitis.² The second abstract concluded, "The function of penile erection is impaired by periodontitis."³

2012 brought (among many other things) another study that reported similar findings and new details. It noted that after "adjusting" for income, age, geographic location, hypertension, diabetes, hyperlipidaemia, coronary heart disease, obesity, and alcohol abuse/alcohol dependence syndrome, patients with ED were more likely to have been diagnosed with chronic periodontitis than control subjects who did not have ED.⁴

The same research group published two research reports in 2013 suggesting that chronic periodontitis can at least contribute to ED. In a cohort of 120 men with both ED and moderate or severe chronic periodontal disease, half received periodontal treatment while the other half did not. The men who were treated had a significantly greater improvement in ED than the men who weren't treated.⁵

The second report from the same group involved eighty men between ages 30 to 40—eighty with ED and eighty-two without this problem.⁶ In the "no ED" group, 23% had severe chronic periodontitis; in the "ED" group, 53% had severe chronic periodontitis.

In 2014 and 2015, PubMed brought us new chronic periodontitis/ED research abstracts. The 2014 abstract⁷ was relatively cautious:

It may be concluded that chronic periodontitis and ED are associated with each other. However, further large scale studies . . . are warranted to explore the link between these two diseases.

Two more abstracts were published by PubMed in 2015, and (yes, already!) one in 2016. The first 2015 abstract⁸ reported that "patients with ED were more likely to have been diagnosed with chronic periodontal disease" (for the scientifically inclined, $p < .001$). "Moreover, the association was much stronger in the men aged less than thirty years and more than fifty-nine years" (again, for the scientifically inclined, $p < .001$).

Removing diseased teeth appears to decrease damage to the inside of blood vessels supplying blood to the penis.

This research abstract was the first to report effects of a specific treatment:

Dental extraction seems to attenuate damage to the penile endothelial beds caused by CPD-related inflammation and overcame the process of ED in the middle-aged and older populations.

In plain English, removing diseased teeth appears to decrease damage to the inside of blood vessels supplying blood to the penis in middle-aged and older men.

The second 2015 abstract⁹ reported a nationwide study of 1,025,340 men (no kidding!), of whom 321,103 were diagnosed with periodontitis. ED was reported to be "intimately related" with periodontitis, as was osteoporosis.

The authors of PubMed's only 2016 abstract on this topic (so far) concluded:

The results of this systematic review revealed a positive association between CP and ED; however . . . better-controlled studies of socially homogeneous populations as well as pathophysiological studies are required to confirm the relationship between CP and ED and to explore the biological mechanisms involved.¹⁰

There are definitely many other causes and treatments for ED. If you've tried them all, and things still aren't working optimally, it may be time to consider a visit to your dentist and/or periodontist! As a bonus, if periodontal disease is found and treated, many other health problems may also be improved.

An observation about ED/periodontitis research: All ten abstracts reporting the link between ED and chronic periodontitis were written by research teams located outside these United States—in Israel, India, China, Taiwan, Turkey, and Korea. The only PubMed abstract from an American research group (at UCLA) effectively "dances around" the ED/chronic periodontitis link reported weakly or strongly by all the others. ●

Endnotes

1. Zadik, Y., et al. "Erectile dysfunction might be associated with chronic periodontal disease: two ends of the cardiovascular spectrum." *J Sex Med.* 2009.
2. Sharma, A., Pradeep, A. R., Raju, P. A. "Association between chronic periodontitis and vasculogenic erectile dysfunction." *J Periodontol.* 2011.
3. Zuo, Z., Jiang, J., et al. "Effect of periodontitis on erectile function and its possible mechanism." *J Sex Med.* 2011.
4. Keller, J. J., Chung, S. D., Lin, H. C. "A nationwide population-based study on the association between chronic

Endnotes continued on page 8

Has the Cause of Psoriasis Been Found?

- Psoriasis is caused or aggravated by *Helicobacter pylori*
- Psoriasis can be eliminated or improved by *H. pylori* eradication

“Finding the cause” is the very necessary first step to a safe, effective solution to any health problem. Unfortunately, that first step is almost always ignored by the “standards of care” in much of today’s medicine. Those “standards” routinely recommend one or more of thousands of patent medicines (also known as “drugs” or “pharmaceuticals”) for nearly any health condition, even though it’s perfectly obvious that no health problem has ever been caused by a deficiency of patent medicines! Duh!

Psoriasis has traditionally been a “disease without a known cause.” As you likely know, psoriasis is characterized by plaques of red skin, most often covered with silver-colored scales (“plaque”), which are often itchy and painful, sometimes cracking and bleeding. According to WebMD,¹ “Although you can’t cure psoriasis, there are ways to ease its symptoms.”

Nature’s medicine can help those with psoriasis. Many natural treatments involve overall lifestyle changes which are thought to work by enabling the body to overcome whatever it is that’s really the cause of psoriasis. The most effective natural treatment I’ve seen is nickel dibromide, which has helped clear psoriasis in most—though not all—individuals who’ve tried it. Nickel dibromide (sold as Psorizide® Ultra) was developed by Tulsa dermatologist Steven A. Smith, who published a 1997 article² about it.

Although Dr. Smith wrote that bromide had been found to work against the overly rapid growth of skin cells involved in psoriasis, what caused skin cells to grow excessively rapidly was still not clear.

Three publications appear to have brought us closer to the actual cause. Here are the titles of two of these three publications:

- “Complete remission of palmoplantar psoriasis through *Helicobacter pylori* eradication: a case report.”³
- “Clearance of chronic psoriasis after eradication therapy for *Helicobacter pylori* infection.”⁴

These two publications are just single-case reports. However, it’s not unheard of for a single case to be the basis for a major shift in medical thinking and treatment. The “single case” discovery that *H. pylori* could cause peptic ulcers was the first step on the road to the 2005 Nobel Prize in Physiology for Australian internist Barry J. Marshall and his colleague J. Robin Warren.

The third publication implicating *H. pylori* as a causative factor in psoriasis⁵ was based on examination and testing of three hundred individuals with psoriasis plaque. All of those—100%—diagnosed with psoriasis judged “moderate” or “severe” had positive tests for *H. pylori*; 37% of those with “mild” psoriasis were *H. pylori* positive. Treatment to eliminate the *H. pylori* was just as effective as conventional patent medicine treatment in improving or eliminating psoriasis.

While it’s still too soon to conclude that *H. pylori* is the root cause of psoriasis, it appears to be at least a major factor. If you or anyone you know has psoriasis, why not have testing done—perhaps the “*H. pylori* breath test”—to see if *H. pylori* is involved? If it is, please be aware that “standard of care” treatment for *H. pylori* can have some nasty adverse effects. Please make sure to check with a physician skilled and knowledgeable in natural medicine for effective but much safer natural treatment for *H. pylori*, which according to these three reports will likely improve or eliminate psoriasis! ●

Endnotes

1. www.webmd.com/skin-problems-and-treatments/psoriasis/treatment.
2. Smith, S. A., et al. “Improvement of psoriasis vulgaris with oral nickel dibromide.” *JAMA Dermatology* 1997.
3. Hübner, A., Tenbaum SP. “Complete remission of palmoplantar psoriasis through *Helicobacter pylori* eradication: a case report.” *Clin Exp Dermatol*. 2008.
4. Ali, M., Whitehead, M. “Clearance of chronic psoriasis after eradication therapy for *Helicobacter pylori* infection.” *J Eur Acad Dermatol Venereol*. 2008.
5. Onsun, N., et al. “Impact of *Helicobacter pylori* infection on severity of psoriasis and response to treatment.” *Eur J Dermatol*. 2012.

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arrhythmia”) and deaths from cardiac arrhythmia.

Whatever happened to intravenous (or intramuscular) injections of magnesium for angina, heart attack, or as treatment to prevent arrhythmia? First, as my colleague Alan R. Gaby, MD, has pointed out, some subsequent researchers used excessive amounts of magnesium; adverse effects occurred. Those

adverse effects are completely preventable: *Use less magnesium! The smaller amounts worked very well!* Second (and likely most important): magnesium is neither patentable nor “approved” by *los federales*. Can’t charge \$1,000 an injection for it!

Once again, I’ve digressed. Back to what’s been done at Tahoma Clinic with the rapid IV magnesium push.

Migraine

In the large majority of those suffering from migraine, the rapid IV magnesium push completely relieves an acute migraine. A series of these IVs (given two to three times weekly for three to four weeks) will almost always significantly lessen the frequency and severity of migraines, although allergy

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Is “Red Meat” Really Bad for You?

- Yes, it’s bad for you—if the cattle ate grains and were given antibiotics
- No, it’s good for you—if the cattle were 100% natural and eating grass

We’ve been hearing/reading/seeing a lot of news about adverse health effects of red meat; what we’re not hearing at all is that this research has one very serious flaw.

What’s missing from the “red meat is bad for you” research? Free-range, 100% grass-fed beef, that’s what . . . but isn’t that a silly description? No one feeds cattle grass: For hundreds of thousands of years, cows and calves have all eaten grass and other vegetation *all by themselves!* And so have other “grazing” animals—deer, antelope, buffalo, and others. By contrast, cattle have eaten grain as a substantial part of their sustenance for less than two centuries. But I digress. . . .

Starting in the 19th century, more and more cattle were taken “off the range” and confined to what were called “feedlots,” where the large majority of foods available to them were grains. By the 20th century, most cattle were treated this way. Starting in the second half of the 20th century, cattle (as well as chickens, turkeys, pigs, and other “livestock”) have been given increasing quantities of antibiotics.

Grains and antibiotics are not what Nature and Creation intended for cattle! For literally hundreds of thousands of years

before that, the “red meat” eaten by humans has come from animals eating a 100% organic diet. For two centuries and a little more, grains and antibiotics. And researchers are finding that the meat from these un-naturally fed animals might be bad for our health? Duh!

But isn’t that just a theory? Not at all! It’s been known for decades that grain-fed cattle have different fatty acid, vitamin, and antioxidant content. Here’s a quote from a 2010 review:¹

Research spanning three decades suggests that grass-based diets can significantly improve the fatty acid composition and antioxidant content of beef . . . Grass-based diets have been shown to enhance total conjugated linoleic acid, and omega-3 fatty acids FAs. While the overall concentration of total saturated fatty acids is not different between feeding regimens, grass-finished beef tends toward a higher proportion of cholesterol neutral stearic acid, and less cholesterol-elevating saturated fatty acids such as myristic and palmitic fatty

acids. Several studies suggest that grass-based diets elevate precursors for Vitamin A and E, as well as cancer fighting antioxidants such as glutathione and superoxide dismutase (SOD) activity, as compared to grain-fed contemporaries. Fat conscious consumers will also prefer the overall lower fat content of a grass-fed beef product.

Bottom line to all this? Non-vegetarian humans have been eating meat from grazing animals for hundreds of thousands of years, and not suffering the various consequences that modern researchers are finding in their research about eating meat from grain-fed, antibiotic-treated cattle. If your “red meat” is from cattle eating as cattle have eaten for hundreds of thousands of years, don’t worry about it. Copy Nature! ●

Endnote

1. Daley, C., et al. “A review of fatty acid profiles and antioxidant content in grass-fed and grain-fed beef.” *Nutrition Journal* 2010.

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elimination and desensitization and blood sugar control are often necessary for complete migraine elimination.

Asthma

The rapid IV magnesium push given during an acute attack of asthma almost always eliminates it, although immediate repetition is sometimes needed. Despite this success in eliminating acute attacks, a series of these IVs usually only lessens the frequency and severity of asthma, only occasionally eliminating asthma entirely. Allergy elimination and desensitization, diet change, and specific supplementation are all usually necessary for major

lessening or elimination of childhood or adult asthma.

Relief of acute asthma with intravenous magnesium has been the subject of considerable recently reported research, nearly all favorable. (Apparently, overdoses of magnesium have not been used in this research, as was the case with intravenous magnesium for angina and other cardiovascular problems done in the 1990s.)

Physicians in Paraguay⁸ reported using intravenous magnesium sulfate in children ages six to sixteen whose asthma failed to improve after two hours of “standard therapy.” Their conclusion:

Early utilization of . . . prolonged magnesium-infectious mediated asthma, expedites discharges from the emergency department with significant reduction in healthcare cost.

The Cochrane Database Systematic Reviews conducts reviews of accumulated health care research independently of patient medicine company or potentially forcible (“government”) money or interference. The review⁹ was based on fourteen studies meeting Cochrane’s criteria. From their conclusions:

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This review provides evidence that a single infusion of 1.2 grams or 2 grams IV magnesium sulfate over 15 to 30 minutes reduces hospital admissions and improves lung function in adults with acute asthma who have not responded sufficiently to oxygen, nebulised short-acting beta2-agonists, and IV corticosteroids.

Reynaud's Syndrome

The rapid IV magnesium push will lessen or eliminate acute blood vessel spasm in the hands or feet, restoring more normal circulation; an IV series will lessen the frequency and severity of recurrence. Unlike some of the other spasm problems discussed, Reynaud's syndrome is more frequently lessened than eliminated by this procedure. Allergy and sensitivity identification, elimination and desensitization is additionally helpful in reducing Reynaud's syndrome, as are inositol hexaniacinate, time-release niacin, L-citrulline, L-arginine, and vitamin E.

Menstrual Cramping

The rapid IV magnesium push IV can lessen or eliminate severe, acute menstrual cramping. A series of these IVs frequently lessens the severity of the cramping each month. Omega-3 fatty acids (fish oil, one tablespoonful daily as well as oral magnesium (which will not relieve the acute episodes of menstrual cramps) for several months are usually necessary to completely eliminate these cramps. (Menstrual cramps are *not* a result of a Motrin, Advil, or Midol deficiency!)

Esophageal Spasm (recurrent)

This is a problem seen frequently at Tahoma Clinic. The rapid IV magnesium push given twice weekly for three weeks will almost always eliminate this problem. After that, magnesium can be taken orally to prevent recurrence, even in individuals who had tried oral magnesium with no relief. (See also below for details about why this happens.)

Back Muscle Spasms

The rapid IV magnesium push usually relieves acute back muscle spasm; an IV series (twice weekly for three to four weeks) frequently eliminates the problem. As always, look for causes: chiropractic or osteopathic adjustments are often necessary for complete elimination of back muscle spasms; occasionally food allergy and sensitivity is involved, too.

Intestinal Spasms (recurrent)

The rapid IV magnesium push almost always eliminates acute intestinal spasm; an IV series lessens the frequency and severity of the problem. General diet improvement, digestive function improvement, and allergy and sensitivity identification, elimination and desensitization are variably and usually necessary for complete relief.

"Kidney Stone Pain" or "Ureteral Colic"

In English this means cramping of the muscular tube from one kidney to the bladder, and it is very often caused by attempted but incomplete passage of a kidney stone, which remains "stuck in place" by spasms of the ureter. Since the rapid IV magnesium push relaxes ureteral muscle spasms, most often the stone can then be "passed" and pain stopped.

Although we're not urological specialists, many of those who've visited Tahoma Clinic have learned about this treatment, resulting in nearly-always-successful passage of many "stuck" kidney stones over the years we've been using the rapid IV magnesium push. Two consecutive "pushes" are sometimes required before the pain is relieved and the stone passes.

(For other reasons, these exact same nutrients—magnesium and vitamin B—taken in small daily oral doses will almost always *prevent* calcium oxalate kidney stone formation.)

Intussusception

"Intussusception" is a technical term for an intestine which has "telescoped" in on itself, causing very intense pain. The usual

treatment is hospitalization and surgery immediately, which in the absence of any other treatment is the thing to do! But a very brave woman who'd been coming to Tahoma Clinic for other things for a few years showed us that hospitalization and surgery isn't necessarily the only option.

Her husband had taken her to a hospital emergency room where she was told that her intense abdominal pain was due to an intussusception and that surgery should be done right away. She refused, and told her husband to drive to Tahoma Clinic "as fast as the law allows." I urged her to return to the emergency room; she refused and asked me to try "that shot I heard about at Tahoma that relieves stuck kidney stone pain." Three consecutive rapid IV magnesium pushes relieved the intense spasm (and apparently the intussusception) completely.

How Much Magnesium and Vitamin B6?

The IV usually used by Tahoma Clinic physicians contains magnesium sulfate 3000 milligrams (6ccs), vitamin B6 300 milligrams (3ccs), mixed with "½ normal saline" (technically, 0.45% saline; 11 ccs) in a 20cc syringe. As noted above, for some conditions one, two, or even three consecutive "pushes" are needed to relieve the problem.

Other conditions require a series of IVs ranging from six to ten or twelve repetitions, occasionally more, given once or twice weekly depending on clinical response and according to the clinical judgment of the responsible physician. To best relax spasms of all sorts, each IV should be given as rapidly as tolerable (explanation for that soon!).

IV magnesium relaxes and dilates the blood vessels, causing an overwhelming sensation of heat (which passes) if given too fast. After the first experience of all that heat, individuals are advised why the "rapid push" is better, but to avoid repeated over-heating and a possibly greater chance of fainting, they're asked to push

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the material in the syringe through the IV tubing themselves “as fast as they can stand that heat,” as they can better judge when to “back off.”

Very occasionally an individual will faint during the rapid IV magnesium push, so the IV is usually given while the individual is lying down or reclining in a chair. Fortunately, recovery is always rapid.

Why Not Oral Magnesium and Vitamin B6?

First, oral magnesium and vitamin B6 won't work fast enough in any acute situation. In order to relax an acutely spastic muscle of any sort, it must be *flooded* with magnesium. Only a rapidly given IV will do this job. Over time, oral doses of magnesium and vitamin B6 will help to lessen the frequency and severity of many of the conditions listed above, but oral supplementation takes considerably longer than a relatively brief series of intravenous injections and often isn't as effective.

A second reason oral magnesium supplementation frequently isn't as effective as intravenous administration has to do with some of the unique characteristics of intestinal magnesium absorption. As nearly everyone knows, large oral doses of magnesium (as in “milk of magnesia”) are almost always capable of “clearing the bowels,” and if continued, will cause diarrhea for as long as they're taken. But it isn't generally known that there are oral doses of magnesium not quite large enough to cause diarrhea, but definitely large enough to cause magnesium and many other nutrients to be poorly absorbed.

Dr. Stephen Davies documented several cases of what he termed “magnesium-induced magnesium deficiency.” In these individuals, low levels of magnesium resulted from taking enough magnesium orally to cause overly rapid passage of the magnesium through the bowels, but not overt diarrhea. Dr. Davies termed this condition “gastro-intestinal hurry.” In this circumstance, plenty of magnesium is moving through the intestines, but not enough can be absorbed.

I've worked with several individuals whose “across the board” (including magnesium) mineral deficiencies were traced back to magnesium—for them—supplementation. One woman found she didn't need to come in for rapid IV magnesium pushes for acute pain from time to time any more when she cut back her oral magnesium supplement from 1000 milligrams daily to 450 milligrams daily.

Because of this potential for causing “gastrointestinal hurry” with consequent magnesium and other nutrient malabsorption, I usually recommend that oral magnesium supplementation be kept at 500 milligrams daily, or less, unless you're working with a physician skilled and knowledgeable in nutritional medicine.

If an individual has not been “eating his or her green veggies” for long enough, the amount of magnesium outside the cells drops to a critically low level.

Finally, the most technical reason of all: For optimal body functions of all sorts, magnesium is overwhelmingly accumulated *inside* of cells. To keep that “inside to outside” distribution so high inside of cells, each cell membrane contains a mechanism called “the magnesium pump” which keeps moving magnesium from the outside to the inside of each cell.

If an individual has not been “eating his or her green veggies” (best dietary sources of magnesium) for long enough, the amount of magnesium outside the cells drops to a critically low level. Some of the inside-the-cell magnesium must be released to outside the cells. If this goes on for awhile, and the amount of magnesium inside the cell drops too low, *the cell membrane loses its ability to pump the magnesium to the inside of the cell*, so even if that person starts eating green veggies again, or takes sufficient oral (or rubbed-into-the-skin) magnesium, the magnesium still can't get back into the cells.

What happens then? Remember, magnesium inside muscle cells helps them to

relax. Without enough magnesium inside, they can't do this well—the result is cramps and spasms. Another result is persistently low energy, as magnesium is necessary for the production of ATP (the “energy molecule”) by the mitochondria present inside every cell in our bodies.

At our Nutritional Therapy in Medical Practice seminars, Dr. Gaby told us about animal research that solved this problem. Animals were deliberately fed a magnesium deficient diet until their intracellular magnesium dropped so low that the “magnesium pump” (remember, not a real “pump,” just a name) stopped working.

After that, no amount of oral magnesium would “turn the magnesium pump on again,” so the intracellular magnesium stayed low. But when the researchers gave rapid IV pushes of magnesium to these animals, it literally forced its way into the cells (without doing any damage to them). After enough rapid IV magnesium pushes, the magnesium level inside each cell (compared to that outside each cell) went back to the optimal proportions. Somehow, that switched on the “magnesium pump” again. No more IVs were needed, and oral magnesium would work again!

And *that's* the reason for the rapid IV magnesium push. When anyone is suffering from intense cramping, the rapid IV magnesium push will almost always relieve the spasm and pain safely, regardless of whether there's a “magnesium pump problem” or not. Slowly administered intravenous (IV) magnesium, intramuscular (IM) magnesium, and oral magnesium cannot “cover all bases” to relieve painful spasm nearly as well.

In Summary

The rapid IV magnesium push relieves acute muscle spasm of all sorts. A series of these injections will usually lessen and often completely eliminate recurrent spasms. While oral supplementation of these nutrients can also be helpful, it cannot do as well as rapid intravenous administration.

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Erectile Dysfunction Treatment

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The Many Applications of the Rapid Intravenous Magnesium Push

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However, the rapid IV magnesium push should rarely be relied upon as the entire treatment for any of the conditions noted above. As muscle spasms can have many causes, those causes should be identified and eliminated whenever possible, even while relying on intravenous magnesium for more immediate symptom relief. ●

Endnotes

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