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## REPORT

**Tagamet To Treat  
Herpes And Shingles**

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Herpes simplex and herpes zoster are viral diseases that can be kept in remission by a healthy immune system. Direct evidence for this can be seen in cancer patients who undergo immune-suppressing chemotherapy and experience severe herpes outbreaks as a result.<sup>1</sup> Similar herpes flare-ups occur in other immune-comprising situations such as normal aging, where a latent herpes zoster virus can reemerge to cause painful shingles.

While pharmaceutical companies promote expensive and only partially effective anti-viral drugs, there is evidence dating back more than 20 years that the drug cimetidine (sold over-the-counter as Tagamet) is highly effective in shortening the duration or preventing the outbreaks of herpes and shingles. The problem is that virtually no physicians are prescribing cimetidine to their herpes (or shingles) patients, despite persuasive findings in peer-reviewed scientific journals.

When it comes to treating herpes infections, conventional doctors seem to only pay attention to drug company propaganda, while failing to recommend lower cost drugs (like cimetidine) that have been shown to work especially well in herpes patients.

In 1988, The Life Extension Foundation recommended that certain cancer patients take the drug cimetidine (Tagamet) for the purpose of enhancing immune function. Cimetidine favorably modulates immune function via several mechanisms, but its best documented property is its inhibitory effect on T-suppressor cell function. The immune system is weakened when T-suppressor cells prematurely shut down immune function. Since cimetidine inhibits T-suppressor cell function, it can significantly enhance immune surveillance in some people.

by William Faloon and Kate Kitchen

Cimetidine (Tagamet) is a histamine<sub>2</sub> (H<sub>2</sub>) receptor antagonist and, as such, can contribute to the enhancement of immune function. Various studies indicate cimetidine's effectiveness in suppressing herpes infections.

The first case observation occurred in August 1977 when a patient developed shingles just before commencing a course of cimetidine for a chronic stomach ulcer. The patient experienced dramatic relief of the shingles pain and rapid disappearance of the eruption. On the basis of this observation, cimetidine was prescribed to 21 patients with herpes zoster (shingles). The results were encouraging in 18 out of these 21 patients. The trial was then extended to other herpes virus infections. In six out of seven patients with herpes labialis (lip), the blisters were aborted, and in one patient with herpes keratitis the result was also encouraging, with the attacks being markedly shortened in duration and reduced in frequency. The results of these preliminary trials showed the potential role of cimetidine in the treatment of herpes virus infection.<sup>(2)</sup>

In 1996, a clinical trial was conducted on 221 patients with herpes zoster who were treated daily with cimetidine at 3 x 200 mg during the day and 1 x 400 mg at night. The results showed that cimetidine shortened the period of disease duration. The authors suggested using cimetidine in the treatment of shingles during the earliest stages of the disease.<sup>(3)</sup>

A case reported in Canada resulted in the statement that cimetidine therapy appeared to reduce the expected length of the active phase of herpes zoster from 35 days or more to just 10 days.<sup>(4)</sup>



Herpes simplex outbreaks have been shown to go into remission in response to the proper dose of cimetidine. In cases of herpes zoster (shingles) which targets the older population, cimetidine has been successfully used to lessen the debilitating pain and intensity of the skin rash and eruptions

At the Golda Medical Center in Israel, in 1994, a double-blind placebo-control study of cimetidine treatment versus placebo was conducted for one week in 22 patients with herpes zoster (shingles). Those who were treated with cimetidine were found to recover much more quickly from skin rash and pain than those who were given the placebo.(5)

At the Department of Neurology at Lady Davis Carmel Hospital in Israel, a randomized study evaluated the effect of cimetidine in the treatment of herpes zoster virus. The conclusion was that cimetidine treatment “shortened the median interval until the first decrease in pain, shortened the median interval until the complete resolution of pain and promoted faster complete healing of skin lesions....”(6)

A paper presented by a researcher at Michigan State University in the Department of Pediatrics and Human Development (1990) stated:(7)

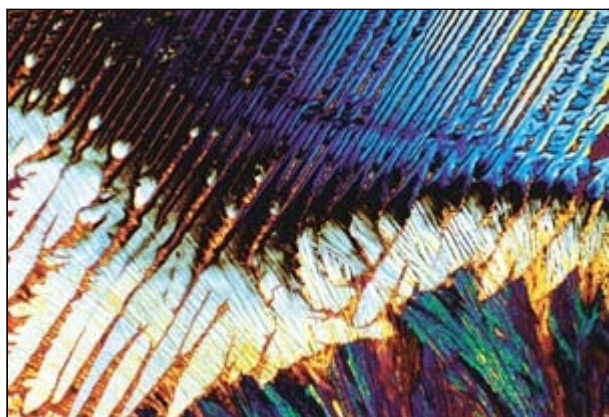
“Suppressor T lymphocytes possess histamine<sub>2</sub> (H<sub>2</sub>) receptors and contribute significantly to the function of the immune system. Cimetidine has been shown to enhance a variety of immunologic functions both in vivo and in vitro because of its inhibitory effects on suppressor-cell function. Successful tumor immunotherapy has been reported in experimental animals. Patients who received cimetidine were shown to exhibit enhanced cell-mediated immunity as evaluated by increased response to skin-test antigens, restoration of sensitivity following development of acquired tolerance, and increased responses of lymphocytes to mitogen stimulation. Patients also demonstrated that patients with herpes zoster and herpes simplex who were given cimetidine may have benefitted therapeutically from the drug.”

The consensus from these studies is that when cimetidine is administered to those with herpes simplex or shingles, the result is a dramatic relief of the herpetic pain as well as rapid disappearance of the blisters.

Novel approach overlooked

Cimetidine is the generic equivalent of the popular OTC drug better known by the brand name Tagamet. It is used primarily to relieve symptoms of esophageal reflux such as heartburn. Tagamet functions as a histamine (H<sub>2</sub>) receptor antagonist. What most doctors don't know is that T-lymphocyte suppressor cells have the H<sub>2</sub> receptor. By blocking this receptor (using an H<sub>2</sub> receptor antagonist such as Tagamet), the immune system can be temporarily turned up to help combat certain cancers and herpes viral infections.

Tagamet is manufactured by SmithKline Pharmaceuticals, headquartered in Philadelphia. When Life Extension asked about Tagamet's potential use in herpes treatment and quizzed about the lack of promotion for same, Carl Friedman from SmithKline's Research and Development Department said, “It [cimetidine] went off patent in 1994. We aren't vested in it anymore, so there's nothing to gain from it.” Echoing his sentiments, Deborah Frutos, from the pharmaceutical company's Corporate Finance and Administration Department said, “There's no incentive for us to promote our less expensive generic [cimetidine]. If we were to do any study for that, it would take lots of time and money. Even if it proved to be a good study, most physicians have other products they'd rather prescribe.” She added, “A grant guarantees that if we prove the drug is indicated for that [treating herpes], the generic would be manufactured and once the patent is protected, anyone can manufacture it. Let's just say we're not going to do it.”



Cimetidine is the generic equivalent of the popular OTC drug better known by the brand name Tagamet. Pictured above is a microscopic view of cimetidine.

The unwillingness of drug companies to promote their own products unless a patent guarantees them a fat profit margin is one reason why many promising therapies are overlooked. A person suffering from a herpes simplex or shingles outbreak can obtain Tagamet (cimetidine) over-the-counter for \$38 a month as opposed to over \$200 a month for the new anti-viral drugs being promoted to doctors. While there are no side-by-side comparisons, published studies indicate that Tagamet (cimetidine) may be more effective than FDA-approved anti-viral drugs.

Here we have cimetidine right under our noses and offered at a fraction of the cost of anti-viral drug therapy. Why is the majority of the medical community ignoring it? When we asked three practicing pharmacists if physicians ever recommend cimetidine to herpes patients, all three responded in the negative: 1) “rarely,” 2) “not much” and 3) “uh... sometimes, but not very often.” Asking the same question of three physicians, the answers were equally noncommittal and nondescript.

Cimetidine functions as an immunomodulator. In a collaborative study by several universities worldwide, 125 patients who were scheduled to undergo surgical procedures for colon or rectal cancer were randomized to

receive either placebo or cimetidine preoperatively during a five day regimen. The conclusion was that a short course of cimetidine appeared to effect patient survival.<sup>8</sup> Their hypothesis was based on their knowledge of previous studies that showed cimetidine to be effective as an immunostimulant.

## Herpes simplex

The herpes simplex (HSV) is sexually transmitted by direct contact. HSV1 causes fever blisters on the mouth, sometimes on the face. HSV2 affects the genital area and is more commonly known as genital herpes. Once a person is infected with herpes simplex, they can spend a lifetime waiting for an outbreak, or they may experience several outbreaks a year. There is no known cure. The virus may lie dormant for months or years. Some people don't even know they have it until they have their first outbreak that manifests itself by an itchy and painful irritating rash, which then erupts as unsightly blisters.

The Centers for Disease Control in Atlanta recently reported that 45 million adolescents (age 12-plus) and adults in the United States are infected with genital herpes. Slightly more prevalent in women, this disease lays its claim on one of every four women and one of every five men in the U.S.

In the past 20 years, the number of Americans with genital herpes has increased 30%, especially among white adolescents.

The infection becomes more pronounced in severity in people whose immune systems are compromised, e.g., in patients who have AIDS, cancer or other diseases, or who have undergone an organ transplant. HSV2 can be fatal to infants born to mothers who test positive for the disease and are experiencing an outbreak during delivery. (Physicians who are informed ahead of time normally perform a Caesarian section to prevent the mother from shedding the virus onto her baby.)

## Herpes zoster (shingles)

The most common neurologic condition known is herpes zoster, usually referred to as shingles. The CDC says that up to one million people in the United States contract herpes zoster each year. David Cooper, M.D., a contributing editor to JAMA, stated in 1998 that shingles afflicts more than one million people every year.

Herpes zoster is a reactivation of the virus that causes chicken pox. Once a person has recovered from chicken pox, the virus (varicella) remains dormant, hiding among the connective nerve tissue in the body. No one seems to know why it occurs, although stress and/or a compromised immune system is thought to exacerbate the condition, but it usually activates in people over the age of 50. Traveling through the ganglia, it causes a tingling, stinging or burning sensation. A couple days later, once the virus has completed its journey to the skin, an irritating and painful rash and accompanying blisters may erupt. The resulting condition can be so painful, the patient may be unable to tolerate clothing or anything that touches the affected area.

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#### Raising public awareness

Shortly before his death this year, Steve Allen appeared with his lovely wife Jayne Meadows on NBC's "The Today Show". They wanted to bring to light this illness that many would prefer not to discuss in public. Both of their mothers had suffered with the painful virus and in 1999, Meadows had undergone a similar experience, causing her to cancel an appearance with her husband on another popular television talk show.

Following their appearance on "The Today Show" with Matt Lauer, 8,000 telephone calls were received at the Varicella Zoster Virus Research Foundation and nearly 3,000 visits were logged on the Foundation's website. Shingles had come out of the closet and the public wanted to know what to do about it.

With so much public interest in such a painfully debilitating, often embarrassing illness, you would think physicians would make every effort to inform the general public that an OTC drug is available to them. Yet cimetidine (Tagamet), a drug proven in study after study over the past 20 years to be effective in boosting the immune system, is still a common sense, low-cost medication that is virtually ignored by the medical community.

#### Standard treatment for herpes

Anti-viral drugs are commonly used to treat herpes simplex and herpes zoster. Due to varying intensities of pain and other symptoms associated with herpes zoster, analgesics and various other medications are prescribed. The most popular drug of choice has been Zovirax. Retail cost: Zovirax can cost \$ 112 for a month's supply (150 capsules of 200 mg dosage, five times a day). A stronger dosage, 400 mg, five times a day would be \$206 for a month's supply. And there is yet a stronger dose, which naturally costs even more. (Some patients may only be required to undergo a two-week course of medication while others take it chronically to prevent outbreaks). More modern versions of acyclovir, such as desciclovir, famciclovir, valaciclovir and penciclovir, cost even more.

#### Cimetidine may not work against warts

It is important to understand that cimetidine is not a panacea for every disease that might be helped by improving immune function.

One study used cimetidine for three months to evaluate its effects on 54 people with warts. Cure rates obtained were 32% in the cimetidine-treated group and 30.7% in the placebo-treated group. Thus, no significant difference was found between cimetidine and placebo in effectiveness in the treatment of patients with common warts.(9)

In a much smaller study, the effect of cimetidine was investigated in the management of genital and perigenital warts in children. Four had extensive condylomata acuminata of the genital and perigenital areas. They were treated with high doses (30 to 40 mg./kg of cimetidine) in an attempt to eradicate the condyloma (in two patients) and avoid recurrence in the other two. Cimetidine was administered daily in three divided doses during a three-month period. At the 24-month evaluation, all four patients were free of condyloma. The conclusion of the authors was that cimetidine is effective for primary and adjunctive treatment of condyloma in young children. It also seems to be effective as first-line therapy.(10)

#### Conclusion

Herpes simplex outbreaks have been shown to go into remission in response to the proper dose of cimetidine. In cases of herpes zoster (shingles), which targets the older population, cimetidine has been successfully used to lessen the debilitating pain and intensity of the skin rash and eruptions.

Published studies indicate that viruses like herpes simplex and herpes zoster can be put into quick remission, or the breakouts prevented altogether, when T-lymphocyte suppressor cell function is inhibited. The best way of accomplishing this is to take 200 mg of cimetidine (Tagamet) three times a day and then 400 mg a bedtime. Tagamet is available in pharmacies over-the-counter. Suggested use is to initiate Tagamet as soon as symptoms of a herpes-related virus infection appear. Continue to take it for one to two weeks after all symptoms of the outbreak have abated.

One precautionary note, even though Tagamet (cimetidine) is sold over-the-counter, refer to the package insert to make sure it does not interact with prescription drugs you may already be taking.

Please note that if your doctor prescribes generic cimetidine, it may cost less to obtain it as a prescription drug (especially if you have prescription drug insurance) rather than buying the Tagamet name brand that is available without a prescription.

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