FAQs

Answers To The 25 Most Commonly Asked Questions About The VZV Research Foundation, Chickenpox, Shingles and Post-Herpetic Neuralgia (PHN)

(1) What is the VZV Research Foundation?

The VZV Research Foundation is the world’s only nonprofit organization solely dedicated to the fight against the varicella-zoster virus (VZV) and VZV infections (chickenpox, shingles and post-herpetic neuralgia) through research and education.

(2) Can the Foundation help me determine whether or not I have a VZV infection and advise me on treatments?

The VZV Research Foundation is not licensed to practice medicine and, therefore, cannot make any diagnosis, prescribe medication or make physician referrals. No information contained on this website is medical advice or a substitute for the advice of a physician. If you have any of the conditions or symptoms described on this website, you should consult a physician as soon as possible.

(3) Does the Foundation have a list of physicians who specialize in VZV infections?

Since it is not licensed to practice medicine, the VZV Research Foundation does not have a list of VZV specialists nor can it make any referrals to physicians, pain clinics or patient support groups.

Chickenpox
Shingles
Post-Herpetic Neuralgia (PHN)
PHN Pain Treatments

(4) What is chickenpox?

Chickenpox is a very contagious disease primarily affecting children. It is caused by the varicella-zoster virus (VZV).

(5) Can chickenpox be prevented?

Yes. In March 1995, the U.S. Food and Drug Administration (FDA) approved the
country’s first chickenpox vaccine.

(6) Why should chickenpox be prevented?

Chickenpox is not simply a mild childhood illness, but, rather, a potentially serious infection. While its most common complications are bacterial skin infections, other complications include inflammation of the brain (encephalitis) or pneumonia, although these are rare in otherwise healthy people. According to the Centers for Disease Control and Prevention (CDC), each year, in the U.S. alone, chickenpox complications result in the estimated hospitalization of 11,000 individuals—the majority of whom were otherwise healthy—and 105 deaths—the majority of whom are children.

(7) Is the chickenpox vaccine safe and effective?

Experience and research to date have shown the vaccine to be safe and effective. A five-year, active surveillance study of varicella incidence and hospitalization conducted between 1995 and 1999 at three sites by the CDC reported an 80 percent reduction in varicella incidence, with the greatest decline among children one-to-four years of age.

Shingles

(8) What is shingles and how is it caused?

Shingles is an often-painful outbreak of rash or blisters on the skin. It is caused by a reactivation of the varicella-zoster virus, the same virus that causes chickenpox.

(9) What causes the varicella-zoster virus to reactivate?

Scientists do not know exactly what triggers a reemergence of the varicella-zoster virus. However, scientists do know that it more commonly occurs in people over age 50, and in those who have a weakened immune system brought on by an illness such as cancer and certain medical treatments such as chemotherapy.

(10) Who can get shingles?

Anyone who has had chickenpox can get shingles, although it is most common in individuals over the age of 50. Individuals who have conditions, or are undergoing medical treatments, that weaken their immune systems are also more likely to develop shingles. These include: HIV infection; chemotherapy or radiation therapy; corticosteroids; transplant operations and possibly stress. The VZV Research Foundation estimates that nearly one million individuals develop shingles in the U.S. each year.

(11) What are the signs and symptoms of shingles?

The early signs of a shingles outbreak are so vague, they can easily be mistaken for another illness. They include: burning or shooting pain, numbness, tingling or itching in an isolated region on one side of the body or face. Mild flu-like symptoms, such as headache, fever, chills and nausea, may also be present. Lesions (the rash) appear on the skin from one to 14 days later, usually in a band on one side of the body, or clustered on one side of the face (where there previously was pain). In two to four days, these lesions become fluid-filled blisters. In two to four weeks, they slowly crust, scab and heal. Once the blisters heal, one may continue to have pain for a month or longer. The skin may also become discolored where the rash once was.

(12) Can shingles occur without a rash?

Yes, but this is rare. It is called zoster sine herpete. The shingles rash may also go unnoticed. Shingles typically starts out without the rash. The patient may experience burning or shooting pain, numbness, tingling, itching, headache, fever, chills and nausea. While the rash almost always follows, it may be disregarded or
mistaken for something else.

(13) How is shingles treated?

One of three oral, antiviral medications is usually prescribed for shingles: acyclovir, famciclovir and valaciclovir. Early treatment with one of these drugs—ideally within 72 hours of the appearance of the rash—can lessen the duration of shingles and lower the risk for post-herpetic neuralgia (PHN).

(14) Can shingles be prevented?

Currently, shingles itself cannot be prevented. However, the chickenpox vaccine prevents chickenpox and, therefore, decreases the likelihood that a vaccinated individual will later develop shingles. A similar vaccine is being studied as a possible prevention for shingles in adults who have had chickenpox.

(15) Can a person get shingles twice? If so, does it appear in the same place twice?

Yes, a person can get shingles twice – it recurs in an estimated one to five percent of patients – and it can reappear many years after the initial episode of shingles. If shingles strikes a second time, it will usually not appear in the same location. Most people who seem to experience multiple episodes of shingles are probably having recurrent infection with a related herpes simplex virus and not true shingles.

(16) Can a person who has never had chickenpox develop shingles?

No. To get shingles, one must already have had a case of chickenpox and therefore harbor the varicella-zoster virus in the nervous system. However, the case of His or her chickenpox may have been very mild and unrecognized.

(17) Is shingles contagious?

Shingles cannot be caught from a shingles sufferer. Nor can a person catch shingles if exposed to someone with chickenpox. However, a person who has never had chickenpox can come down with chickenpox if he or she is exposed to the shingles rash.

(18) What should I do if I suspect I have shingles?

See a doctor (e.g., general practitioner, family physician, internist, dermatologist or neurologist) immediately if you are experiencing any of the symptoms of shingles or if there is any unexplained rash or pain in any part of your body. Shingles treatment is most effective if administered by a doctor within 24 to 72 hours of the appearance of the rash. If a doctor cannot determine the cause of a shingles-like condition, the patient can suggest that it could be shingles. If a rash is present, the doctor can conduct a test to determine whether it is shingles.

Post-Herpetic Neuralgia

(19) What is PHN and how is it caused?

PHN (post-herpetic neuralgia) is the name given to the pain that lingers for months or even years after the shingles rash has healed. PHN results from injury to the nervous system caused by the varicella-zoster virus during the shingles infection. The pain of PHN may be sharp, burning, throbbing or stabbing.

(20) What are the signs and symptoms of PHN?

If an individual, whose shingles rash has healed, experiences significant pain in the area where the shingles rash occurred, or beyond that area, it could be PHN. In addition, if touching the skin causes pain, the patient may be experiencing allodynia, a frequent
symptom of PHN. Allodynia is a condition in which the skin is unusually sensitive to normally painless stimuli, such as the touch of clothing or a gust of wind.

(21) How long does PHN last? Will it ever go away?

The duration of PHN varies widely. In some patients, it can last for months or even years. However, for many patients, the pain will lessen over time. Furthermore, there are a growing number of pain relief options for PHN that are proving to be effective for many patients.

(22) What type of physician should be consulted to treat PHN?

If one suspects PHN, a physician should be seen as soon as possible. The physician may make a referral to a pain specialist, neurologist or anesthesiologist who has experience in working with PHN patients.

(23) Can PHN be cured?

Currently, PHN cannot be cured. The relief of the pain it causes is the focus of treatment. However, the effectiveness of treatment for PHN varies widely among patients.

(24) Can PHN be prevented?

Currently, PHN cannot be prevented in all patients. However, prompt medical treatment for shingles can lessen the duration of shingles and lower the risk for PHN. Specifically, the effectiveness of antiviral medication (acyclovir, famciclovir or valaciclovir) is well established if it is taken within 72 hours after the appearance of the shingles rash. [There is a major study underway – The Shingles Prevention Study – whose aim is to determine if vaccination can decrease the incidence and/or severity of shingles and its complications in older adults. The study is also trying to determine if vaccination can protect against PHN. The outcome of this study will help scientists determine whether PHN prevention is a valid strategy using this vaccine.]

PHN Pain Treatments

(25) How is PHN treated?

The following is a brief summary of PHN treatments and their relative effectiveness as assessed in a paper published in the May 2000 edition of the journal Drugs, entitled, "Treatment of Postherpetic Neuralgia: An Update."1 In this article, authors Ghassan E. Kanazi, M.D., Robert W. Johnson, MB, BS, FRCA, and Robert H. Dworkin, Ph.D., reviewed the findings of recent studies.

Each pain relief medication or procedure assessed is referenced. Reference is also made to studies conducted on other medications that fall under the same classes of drugs, but that were unable to be included in this text due to space limitations. All study references are provided so that physicians can learn more about each treatment, including potential side effects.

One’s physician, who is most familiar with an individual’s case of PHN, will be able to determine which of these or other treatments can best relieve an individual’s PHN-related pain. Please note that the opinions expressed are those of the article’s authors and not the VZV Research Foundation, which is not licensed to practice medicine.

I. Pharmacological Approaches
   (A) Topical Agents

Topical agents include the lidocaine patch (Lidoderm), a patch containing a solution of lidocaine, which is the same medication used by dentists. The lidocaine patch was approved by the FDA in 1999 to treat PHN.
In their article in the journal *Drugs*, Drs. Kanazi, Johnson and Dworkin cite studies that found "a majority of patients treated with the...patch...reported moderate or greater pain relief." 1,2,3,4

Capsaicin cream is sold as a pain reliever for arthritis and PHN. Drs. Kanazi, Johnson and Dworkin stated, in their article, that capsaicin cream "continues to play a minor role in the treatment of patients with PHN. Compliance...is low because of the intense burning after application, which may, however, lessen with time." 1 These authors also reported a recent review concluded there is no evidence of significant improvement following capsaicin treatment. 1,5

Scientific articles covering other topical agents: 1,5,6,7

(B) Oral Medications

**Antidepressants**

In their article, Drs. Kanazi, Johnson and Dworkin stated that tricyclic antidepressants (TCA) are the only type of antidepressants—drugs that are used to treat depression—that have been shown to be effective in managing the pain of PHN. 1 According to these authors, the TCAs include nortriptyline (e.g. Pamelor), which has been found to have a significant analgesic effect in treating PHN pain, and has "fewer (adverse) side effects than amitriptyline, (the TCA which) has been the most widely used antidepressant in the treatment of PHN." 1,8

Scientific articles covering other antidepressants: 1,9,10,11

**Anticonvulsants**

Anticonvulsants, which were originally designed to prevent seizures in patients with epilepsy, include gabapentin (*Neurontin*). Drs. Kanazi, Johnson and Dworkin make reference, in their article, to a study that found gabapentin "significantly reduced (PHN) pain" and resulted in "improvements in sleep, mood and quality of life." 1,12

Scientific articles covering other anticonvulsants: 1,13,14

**Analgesics**

The article by Drs. Kanazi, Johnson and Dworkin notes the controlled-release opioid analgesics include controlled-release oxycodone (OxyContin), which, a study found, provides "significantly greater (PHN) pain relief, reduction of allodynia, decreased disability...than patients receiving placebo." 1,15

Scientific articles covering other analgesics: 1,16

**Ketamine and N-methyl-D-aspartate (NMDA) Receptor Antagonists**

In their article, Drs. Kanazi, Johnson and Dworkin reported recent studies have shown NMDA receptor antagonists provide some pain relief, but some may have adverse effects. 1,17,18,19,20

(B) Nerve Blocks

The article by Drs. Kanazi, Johnson and Dworkin cites a review of several studies, which found "the use of sympathetic nerve blocks...may be effective in relieving pain during acute shingles, (however) these blocks do not appear to provide prolonged relief in patients with longstanding PHN. (Therefore) it has been suggested their use be limited to special occasions where short-term relief is an important treatment goal." 1,21

II. Physical Treatments

In their article, Drs. Kanazi, Johnson and Dworkin note the use of natural fiber clothing, rather than artificial fibers, may help reduce the skin sensitivity (allodynia) often caused by PHN. 1 The authors report that: Transcutaneous Electrical Nerve Stimulation (TENS)
has been "occasionally helpful" 1,22, but one study reported no benefit. 1,23; ultrasound "has a poor record in a few small series of patients with PHN" 1,24,25; and Acupuncture "...seems to provide little benefit in PHN." 1,26 The authors also state that cold packs "often provide short term relief and are always worth trying." 1

III. Psychosocial Interventions

Drs. Kenai, Johnson and Working write, in their article, that cognitive-behavioral therapy, "...Including such specific interventions as relaxation training, biofeedback and hypnosis, has a well-established role in the treatment of patients with chronic pain. 1,27,28 Although no studies have been reported that have specifically examined this... treatment (for) PHN, there is no reason to doubt cognitive-behavioral therapy provides as significant a benefit in PHN as it does in...other chronic pain syndromes...studied." 1

IV. Neuroinvasive Measures

In their article, Drs. Kanazi, Johnson and Dworkin cite a comprehensive review that was conducted of studies evaluating surgical procedures used for the treatment of PHN, including skin excision, dorsal root entry zone lesions, cordotomy and spinal cord and deep brain stimulation. 1,29 Drs. Kanazi, Johnson and Dworkin noted these studies "examined a small number of patients...none have been controlled, and the duration of patient follow-up has often been inadequate. Although some surgical procedures may provide significant relief for a small number of patients with PHN, these procedures are not without risk and are seldom recommended for the treatment of PHN." 1

PHN Pain Treatment References
(To Question # 20)

4 Galer, B.S., Rowbotham, M.C., Perander, J., and Friedman, E. Topical lidocaine patch relieves postherpetic neuralgia more effectively than a vehicle topical patch: results of an enriched enrollment study. Pain 1999; 80: 533-8
5 Alexander, J.I. Postherpetic neuralgia. Anaesthesia 1985; 40; 1133-4
15 Watson, C.P.N. and Babul, N. Efficacy of oxycodone in neuropathic pain: a randomized trial in postherpetic neuralgia. Neurology 1998; 50; 1837-41
21 Wu, C.L., March, A., and Dworkin, R.H. The role of sympathetic nerve blocks in herpes zoster and postherpetic neuralgia. Pain 2000; 87; 121-129
22 Nathan, P.W. and Wall P.D. Treatment of postherpetic neuralgia by prolonged electrical stimulation. BMJ 1974; 3; 645-7
24 Payne, C. Ultrasound for post-herpetic neuralgia. Physiotherapy 1984; 70; 96-7
25 Jones, R.J. and Silman, G.M. Trials of ultrasonic therapy for acute herpes zoster. Practitioner 1987; 231; 1336-40
28 Gatchel, R.J. and Turk, D.C., editors. Psychological approaches to pain management: a practitioner’s handbook. New York (NY); Guilford 1996

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