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RHEUMORS

Practice Newsletter FALL 2017

Who Should Receive the Shingles Vaccine?

GRACE AHN, MD, FACR

The shingles infection is caused by a virus called varicella. When this virus initially infects a person, it causes chickenpox. Typical chickenpox is generally a benign illness in children with symptoms of fever, sore throat, and lack of appetite, followed by a rash on the face and body that resolves quickly. The same virus that causes chickenpox can return later in life and cause more severe disease in adults and immunosuppressed individuals. After the initial infection, the virus goes into a nerve and stays dormant. When this virus reactivates, it causes an infection called herpes zoster, better known as shingles. There are various reasons why reactivation can occur, including trauma, chronic diseases, or stress. Patients most commonly complain of painful area of skin without seeing a rash at first. A few days later, patients eventually develop a painful, raised, and sometimes fluid-filled blistering rash in the same area where the initial pain was felt. These rashes often follow a line of nerve distribution called a dermatome. This can be a straight or curved line and typically localizes to a small area, such as a region of the trunk. The infected individuals often go on to have post-herpetic neuralgia, with lasting chronic pain in the areas of prior rash.

The herpes zoster vaccination can decrease the risk of developing shingles and post-herpetic neuralgia. This vaccine is not given to stop an active infection. It helps to decrease reinfection or severity of an infection. The vaccine is recommended for all adults over 60. The vaccine also can be given if you are 50 and older and have other chronic medical conditions or are taking medications that may decrease your immune system.

continued on inside back page

FUN RHEUM:

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SPONDYLOARTHRITIS
PHYSICIANS
LUPUS
SHINGLES
VARICELLA
BIOLOGICS
IMMUNOSUPPRESSION
ZOSTAVAX

Community Outreach

- **Sjogren's Walk:** Dr. Paul DeMarco demonstrated the use of ultrasound of the carotids as part of diagnosing Sjogren's Syndrome. Drs. Respecio and Thomas answered questions for "Ask the Experts". Visit our Youtube channel to view the "Ask the Experts" discussions.

- **ARA on Television:** Several of the physicians of ARA have been guests on Good Day Washington, WUSA9 and Let's Talk Live, Channel 8 News. Topics included: Autoimmune Diseases and Biologic Treatments, What is Arise Infusion Therapy Services, Osteoporosis, and Psoriatic Arthritis and Biologic Treatments. Each of these interviews can be viewed on our YouTube Channel.

- **DC Lupus Walk:** ARA's Purple Potters team lead by Tiffany Thomas, office manager, successfully landed second place for top team fundraiser. Dr. Jeffrey Potter was the walk's medical honoree and placed 5th as a top

- **ARA in Print:** Dr. Herbert Baraf is contributing to the Sjogren's Foundation's quarterly newsletter. Read his cover story, "Clinical Trials and This Practicing Rheumatologist" with this link: http://www.sjogrens.org/files/sq/SQSummer2017.pdf

Uveitis – Inflammatory Eye Disease

BY GUADA RESPICIO, MD, MS, FACP, FACR, CCD

"My eye doctor said that I have uveitis. He advised that I see a rheumatologist."

What is uveitis?

You may be asked to see a rheumatologist if your ophthalmologist finds that you have uveitis. What is uveitis? Uveitis is an uncommon condition characterized by inflammation of the uvea, which is the middle portion of the eye. The anterior (front) portion of the uvea consists of the iris and the ciliary body; inflammation of this area is described as anterior uveitis or iritis (they are synonymous). If the inflammation extends to the ciliary body, it is then called iridocyclitis. Symptoms may include red eye, eye pain, being very uncomfortable looking at bright lights, a small pupil, or blurred vision. The posterior (back) portion of the uvea includes the choroid; inflammation of this area is called posterior uveitis. Patients may present with blurred vision or floaters (tiny, dark spots that move across one's line of sight). Anterior uveitis is about four times more common than posterior uveitis.

What are the causes of uveitis?

There are multiple causes of uveitis. The main reason patients are referred to a rheumatologist is to be evaluated for a potential systemic autoimmune condition. Uveitis causes are categorized into different subsets: infection vs. autoimmune conditions (systemic autoimmune condition or other immune-related conditions) vs. syndromes isolated strictly to the eye. About 40 percent of patients may have uveitis related to an autoimmune condition. Interestingly, in about 30 percent of patients, there is no identifiable cause. These cases are classified as idiopathic uveitis.

There are numerous infectious causes of uveitis, including bacterial and spirochetal diseases (such as tuberculosis and syphilis), viral diseases (including herpes virus, cytomegalovirus "CMV" and West Nile virus), fungal infections, and parasitic infections (for instance, toxoplasmosis). Blood samples must be obtained to evaluate for exposure to these organisms.

Rheumatologic causes

Uveitis can be the first extra-articular (outside the joint or aside from joint involvement) manifestation of many systemic inflammatory conditions, including the spondyloarthritis family of disorders (ankylosing spondylitis, psoriatic arthritis and reactive arthritis); sarcoidosis; other systemic rheumatic diseases, such as Behcet's disease, juvenile idiopathic arthritis, relapsing polychondritis, Sjögren's syndrome, systemic lupus erythematosus; and other systemic disorders, such as inflammatory bowel disease (Crohn's colitis and ulcerative colitis). It is rare to see uveitis result from a reaction to a medication.

Spondyloarthritis is a family of joint disorders that may include ankylosing spondylitis, psoriatic arthritis and reactive arthritis. These conditions are the most common systemic immune disorders associated with uveitis in North America and Europe. In certain conditions, there is a genetic predisposition to the development of uveitis. For instance, acute anterior uveitis is associated with the human leucocyte antigen HLA-B27. About 20-40 percent of patients with either any one of these HLA-B27-related disorders develop the sudden onset of anterior uveitis. Most patients may have an incomplete or evolving spondyloarthropathy by the time they present with uveitis symptoms so they need to be closely monitored by their rheumatologist for evolution into these systemic autoimmune conditions. Sarcoidosis is another inflammatory condition that accounts for a significant percentage of patients who present with uveitis. In fact, approximately 20 percent of patients develop eye disease as their initial presentation of sarcoidosis. Juvenile idiopathic arthritis (JIA) may be associated with uveitis, especially in patients with the oligoarticular pattern (limited joint involvement) and those whose laboratory tests show positive for antinuclear antibody (ANA).

How is uveitis treated?

There are treatment options for uveitis. The treatment depends on the type and cause of the uveitis. The majority of the time treatment will include a form of steroids, which will help reduce the inflammation. Recently a biologic agent, adalimumab (Humira) was approved for the treatment of uveitis not responding to steroid therapy. Uveitis can be associated with a variety of complications so it is imperative that patients understand the importance of being monitored closely by an ophthalmologist. A slit-lamp examination and a dilated fundus examination are required for the diagnosis of uveitis and to track improvement. It is important to follow up closely with both your rheumatologist and your ophthalmologist so further progression of the disease and complications can be prevented.

Lyme Disease

BY NICOLE THOMAS, MD, FACR

Lyme disease is a bacterial infection caused by the bacterium Borrelia burgdorferi. These bacteria are transmitted to you through the bite of an infected black-legged (deer) tick. There are three stages to Lyme infection. The first stage is called early localized disease. During this stage, symptoms include fever, chills, headaches, fatigue, swollen lymph nodes, and muscle and joint aches. A characteristic red rash develops at the site of the bite 3-30 days later (average is seven days) in 70-80 percent of people. Sometimes, but not always, this rash clears in the center as it enlarges, resulting in a target or "bull's-eye" appearance. The rash can expand rapidly by 2-3 cm/day and has reached up to 70 cm, but most rashes are around 5 cm. Ticks prefer skin folds, so the armpit, region behind the knee, abdomen and groin area are common sites of rash.

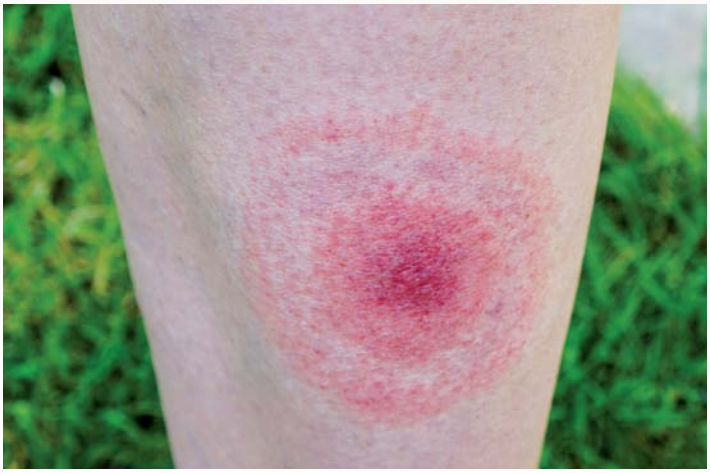
If the infection is not treated, in certain patients it can progress into the second stage of Lyme infection called "early disseminated infection." This usually occurs weeks to months after the tick bite. During this stage, the rash can spread to multiple sites within the body. Fever, joint pains and muscle pain can continue during this stage. In 4-10 percent of patients, Lyme disease can affect the heart, causing palpitations or a slow heart rate. Bell's palsy (loss of muscle tone causing drooping on one or both sides of the face) can occur. Severe headache and neck stiffness, called meningitis, is also possible. Nerve pains, characteristically sharp, shooting, electric-like pains, accompanied by numbness and tingling also can manifest during this stage.

The third stage of Lyme infection, late disease, happens in a minority of patients months to years after the infection. Painful and swollen joints, called Lyme arthritis, can occur. Often, only one or two joints are involved and usually the larger joints, such as the knee, shoulder and ankles, are involved rather than the small joints of the fingers or toes. Lyme disease during this stage may continue to affect the nerves. If the infection affects the brain, it may lead to trouble with memory and concentration.

If you live in the Northeast and Middle Atlantic states from Virginia northward and the upper Midwest, you are at most risk for Lyme infection. Infections also can occur in Northern California and the Pacific Northwest to a lesser extent. Infections occur most often in people who spend time outdoors in the late spring and early summer. Infection is less common but possible in the autumn and in early- to mid-spring. The risk of tick bites is lowest during the late summer and winter.

DIAGNOSING LYME DISEASE

Rheumatologists are doctors who are experts in diagnosing and treating diseases that can affect joints including infections such as Lyme disease.



Sometimes other types of arthritis syndromes can mimic Lyme disease. Primary care physicians and infectious disease doctors also diagnose and treat this condition.

Current guidelines recommend a two-tier testing approach as the most accurate way to detect Lyme disease. The first test, called an ELISA, is a screening blood test that looks for certain antibodies (immune proteins) that are the immune system's response to exposure to the Lyme bacteria. The second test, a Western blot, confirms positive (abnormal) or borderline ELISA results. No lab test is perfect and sometimes these tests can be difficult to interpret. For example, in the early weeks of infection, the blood tests can be negative. Also, patients with other infections or autoimmune diseases can have a positive Lyme screen without truly having Lyme disease, called a "false positive" test. It would be exceedingly rare for patients with late-stage disease, causing swollen joints, heart, or nervous system involvement, to have a negative confirmatory test (Western blot). If a joint is swollen, it is also possible for rheumatologists to aspirate the joint fluid and send it to the lab to see if there is evidence of Lyme infection within the joint fluid.

TREATMENTS FOR LYME DISEASE

Lyme disease is treated with antibiotics. Most people treated in the early stage of Lyme infection do very well. Early infection requires two to three weeks of oral antibiotics. However, patients with late-stage disease may need four weeks of oral antibiotics. Rarely, but if arthritis persists, patients may need a second four-week course of oral antibiotics or IV antibiotics. If the heart or nervous system is involved IV antibiotics are required, usually for two to four weeks. There is no clear evidence that prolonged antibiotic administration for months and months on end is beneficial.

PREVENTION TIPS

A lot can be done to prevent Lyme infection. You should be most careful from April to September when ticks are most active.

- Light-colored clothing makes it easier for you to spot ticks. If possible, closed-toed shoes, long-sleeved shirts, long pants and tucking the hem of your pants into your socks can help prevent a tick's access to skin.
- DEET or clothing containing permethrin are effective chemicals to repel ticks.
- Showering as soon as possible after coming indoors and doing a full-body tick check is recommended.
- Pay special attention to check your hair, under your arms, behind or in your ears, inside your belly button, behind your knees and in your groin area.
- Don't forget to examine your gear and pets as well.
- Using a dryer on high heat for 10 minutes on dry clothing after coming indoors should kill the ticks.
- If the clothes need to be washed first, hot water is recommended.

Use of Intra-articular Hyaluronic Acid and Over-the-Counter Topical Non-steroidal Anti-Inflammatory Drugs for Osteoarthritis (OA)

JEFFREY POTTER, MD, FACR

Osteoarthritis is the most common form of arthritis and is characterized by pain and limited function. The diagnosis is made using a combination of a patient's symptoms, physical examination findings and x-rays. Osteoarthritis can occur at any age but is more common after middle age, and in patients who previously injured the affected joint or who are overweight. Pain typically is worsened by activity or overuse and relieved by resting; many patients require medications to help relieve their symptoms.

Nonsteroidal anti-inflammatories (NSAIDS) are among the first agents used for management of pain related to osteoarthritis. In patients who do not have a satisfactory clinical response to acetaminophen (Tylenol), the use of oral or topical NSAIDs can provide significant relief of symptoms. Examples of commonly used NSAIDs include Advil, Motrin, and Aleve; these are excellent medications for relief of pain and mild inflammation in the appropriate patient population. Patients with underlying kidney disease or significant cardiovascular disease should avoid using NSAIDS, as this can complicate management of these conditions. Patients taking blood thinners and those who have experienced gastrointestinal bleeding also should avoid using these medications due to increased risk of bleeding. Patients using NSAIDs often are advised to take a proton pump inhibitor (ie: Prilosec or similar) or acid blocker (ie: Zantac or similar) to offset stomach upset from use of anti-inflammatories. In patients older than 75, use of topical NSAIDS applied directly to the affected joint is preferable and may limit exposure to possible side effects.

Use of hyaluronic acid is an alternative pain management strategy for patients with osteoarthritis whose symptoms are not resolved by first-line therapies. Also known as "rooster-comb" injections, hyaluronic acid injections are appropriate for patients who have failed therapies such as acetaminophen, nonsteroidal anti-inflammatories (NSAIDS), and corticosteroid injections administered directly into the affected joint. Hyaluronic acid is present naturally in the human body and is found most commonly in the eyes and joint fluid. It works as a cushioning and lubricating agent in the joints of those patients affected with osteoarthritis, but it is not believed to play a role in reversal of the disease process. Rather, it often provides lasting pain relief for patients who have not responded to traditional therapies or who are not ideal candidates for surgical intervention. There are several different available forms of hyaluronic acid; all are administered by injection directly into the affected joint over a course of 1-5 weeks, depending upon the preparation. These injections can be given every six months. The effect can last even longer for many patients.

In summary, current management of osteoarthritis varies from patient to patient. Discussion of available therapies with a rheumatologist will help to alleviate concerns about possible associated side effects from therapy and hopefully lead to treatment and improvement of symptoms. All pharmacologic and nonpharmacologic treatments for osteoarthritis are used in concert with regular physical activity, physical therapy evaluation, and weight loss if indicated. In combination, these management strategies should result in decreased discomfort and improved functionality for patients with osteoarthritis.

Meet ARA's Laboratory Department

BY VINCE CALHOUN, LAB DIRECTOR

Did you ever wonder where all those tubes went when your blood was drawn? Arthritis & Rheumatism Associates, P.C., actually maintains our own medical laboratory testing facility at our Wheaton office location. Dr. Robert L. Rosenberg is the laboratory medical director and is responsible for ensuring that the laboratory meets the strictest quality standards and maintains certification.

The laboratory provides a diverse range of sophisticated testing services that include automated chemistry, hematology and immunology analyses. Most testing that is ordered by your physician can be completed in our lab, however, there are some tests that must be sent to a specialty lab to complete.

To ensure a high level of quality and excellence, our laboratory participates in various commercial quality assurance and improvement programs. In addition, the laboratory is inspected and accredited every two years by the Commission on Office Laboratory Accreditation (COLA). Our medical technologists and laboratory technicians are highly qualified individuals who are accredited and certified through nationally recognized organizations such as the American Society of Clinical Pathologists (ASCP).

WE STRIVE FOR CONVENIENCE AND ACCURACY

The physicians of Arthritis & Rheumatism Associates, P.C., acknowledge that an important benefit of maintaining our own laboratory is the ability to provide our patients with consistently accurate and timely laboratory results. Having the convenience of getting these tests while in the office is an additional benefit for each of our patients.

RHEUMINATION:

The Great Oxymoron: Inflammatory Osteoarthritis

BY DANIEL EL-BOGDADI, MD, FACR

Osteoarthritis typically is thought of as a degenerative arthritis in which the joint space is gradually lost with little or no associated inflammation and erosions (loss of bone in the joint space).

However, there is an aggressive subset of osteoarthritis that is associated with inflammation, erosions, and aggressive joint space loss in the hands. This is known as Inflammatory Osteoarthritis of the Hands or Erosive Osteoarthritis of the Hands. This condition may be confused with other types of arthritis that cause inflammation and damage such as gout, psoriatic arthritis or rheumatoid arthritis.

It is estimated that about 10 percent of the general population has Inflammatory Osteoarthritis. By comparison, the prevalence of rheumatoid arthritis is about 1 percent of the population. Risk factors usually include female gender and family history. Some patients report that their parent had similar problems with the hands. Repetitive use of the hands, usually related to one's occupation, is also a known risk factor.

The joints usually affected are the last joints of the fingers (closest to the fingernail known as the DIP joint) and middle joints of the fingers (the PIP joints). At onset of the disease, patients will complain of abrupt pain, stiffness, swelling and warmth. Later, this will evolve into a chronic dull pain with bony prominences and deformity of the joints. Pain may be incited or aggravated by mild trauma such as inadvertently bumping the finger against an object.

Recent studies have shown that patients with erosive osteoarthritis are at increased risk for metabolic syndrome (obesity, hypertension, diabetes) and high cholesterol compared with those who do not have erosive osteoarthritis.

X-ray findings usually show classic central erosions and "gull-wing" or "saw-tooth" deformities. Usually laboratory tests are negative. It is important to rule out the presence of concomitant psoriasis. Differentiating psoriatic arthritis from inflammatory osteoarthritis may at times be a diagnostic challenge. Furthermore, concomitant gout or pseudogout also may be present in the joints that already have changes associated with inflammatory osteoarthritis. Other conditions such as hypothyroidism, hyperparathyroidism, and amyloidosis should be ruled out.

There are no current guidelines or best approach to treat erosive osteoarthritis of the hands. The mainstays of therapy for inflammatory osteoarthritis are nonsteroidal anti-inflammatories (NSAIDS) which must be used long-term.

These medications require close monitoring for side effects. Complicating this approach is that some patients cannot take an NSAID on a long term basis due to the appearance of undesirable side effects.

Other therapies include joint injections, which may be useful for an acutely inflamed joint. Disease-modifying agents typically used in rheumatoid arthritis are not effective. However, hydroxychloroquine, sometimes used to treat rheumatoid arthritis, also may be used to help relieve pain and inflammation.

Given the significant number of patients with this condition and the severe impact on quality of life, there are currently several ongoing clinical trials to investigate what medications would be most effective. Arthritis and Rheumatism Associates has been involved in the clinical trials for treatment of this condition as we seek to better the lives of our patients who suffer from this crippling, deforming and disabling condition.

JOIN US!

Join Dr. El-Bogdadi at the **Arthritis Foundation's Living Your Yes (RA)** Program on ***November 14th.*** He will be a speaking on Rheumatoid Arthritis. For information and registration link visit our website home page.

Tropical Quinoa Salad With Cashews

Serves 4

FOR THE QUINOA
1 cup dried quinoa, rinsed well
½ red onion, finely chopped
1 cup apple or carrot, finely chopped
juice of 1 lime
2 tablespoons honey or agave

1 tablespoon extra-virgin olive oil
1 large mango, chopped (not overly ripe)
¼ cup mint, finely chopped
1 teaspoon sea salt, to taste
freshly ground black pepper, to taste
½-inch-piece ginger, finely chopped
1 avocado, chopped or thinly sliced
1 cup cashews, coarsely chopped
3 cups Romaine lettuce (or greens of choice), roughly chopped

PREPARATION

1. **Cook the quinoa: Bring 2 cups of water to a boil in a medium saucepan; add the quinoa and simmer, covered 15-20 minutes. Set aside and let cool (spread out for best results).**

2. **In a large bowl toss the chopped red onion and apple/carrot. Whisk together the lime juice, honey and olive oil. Add to the bowl. Add the cooked, cooled quinoa and mango to the bowl and toss well. Mix in mint, cilantro, ginger and salt and pepper, to taste. Garnish with sliced avocado and cashews. Scoop mixture over greens and serve chilled or at room temperature.**

continued from front cover...

Who Should Receive the Shingles Vaccine?

GRACE AHN, MD, FACR

In 2006, the Center for Disease Control (CDC) approved a vaccination for herpes zoster, called Zostavax, for adults 60 and older. In 2011, the Federal Drug Administration approved Zostavax for adults 50 and older, although the CDC's Advisory Committee on Immunization Practices did not recommend this vaccine for adults 50 to 59. In 2012, here in the United States, the American College of Rheumatology, Society for Rheumatologists, initially endorsed the CDC's recommendation of not vaccinating those younger than 60, but in 2015 they reversed the decision, lowering the age recommendation of Zostavax to 50 and older for those with rheumatoid arthritis. This is most important particularly for those patients considering starting more advanced therapy for RA, such as biologic drugs. Zostavax is a live vaccine and therefore it is not recommended for patients who are currently receiving biologic therapy.

This vaccine is given safely to patients who are 50 years and older with a prior history of herpes zoster infection. If you had a recent shingles episode, we recommend delaying the vaccine for six months to a year. For patients who are 50 years and older and already taking low-level immunosuppressants, such as prednisone (typically less than 20mg a day), methotrexate or azathioprine, you still can receive the zostovax vaccine safely. For those who are starting high-level immunosuppression (biologics), we typically recommend receiving this vaccine prior to starting your new therapy. We do not recommend this vaccine if you have an allergic reaction to gelatin or neomycin, which are common components of other vaccines; if you are immunosuppressed with certain conditions; or if you are pregnant.

If you have a question about whether or not you should take the herpes zoster vaccine, please talk to your doctor.

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Arthritis & Rheumatism Associates, P.C.
2730 University Blvd. West, #310
Wheaton, MD 20902
301-942-7600

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Arthritis & Rheumatism Associates, P.C.
EDITOR:
Daniel Tucker, CEO
MEDICAL EDITOR:
Evan Siegel, MD, FACR
DESIGNER:
Brenda Brouillette RN, BS -
Business Development Specialist

Pneumonia Vaccines - Prevnar13® (PCV13) and Pneumovax23® (PPSV23)

BY JUSTIN PENG, MD, FACR

Pneumococcal infections, including pneumonia, are a leading cause of hospitalizations, morbidity and mortality here in the U.S. There are many different types of pneumococci, but the most commonly identified cause of pneumonia hospitalizations in the U.S. is the bacterium Streptococcus pneumoniae, also called pneumococcus. Vaccination against these organisms reduces the number of cases that occur and lessens the severity of the disease when it does occur.

WHAT ARE THE KINDS OF PNEUMONIA VACCINES?
There are two pneumococcal vaccines licensed for use in the U.S. by the FDA.

1) **Pneumococcal polysaccharide vaccine (PPSV23 or Pneumovax23®)** was first marketed in 1970s to protect against 14 pneumococcal serotypes. In 1983 it was modified to protect against 23 serotypes.

2) **Pneumococcal conjugate (PCV13 or Prevnar13®)** was first marketed in 2000 as PCV7 to protect against 7 pneumococcal serotypes most common in young children. In 2010 it was replaced by PCV13 and now protects against 13 serotypes.

The Center for Disease Control (CDC) recommends pneumococcal vaccination for all babies and children younger than 2 years old and all adults 65 years or older. In certain situations, other children and adults should receive one or both pneumococcal vaccines.

WHAT ARE THE RISKS AND BENEFITS?

- Side effects are usually mild and may include redness, swelling, pain or tenderness at injection site, fever, loss of appetite, irritability, feeling tired, headache, chills. If symptoms occur, they are usually self-limited and resolve in a few days.
- Both pneumococcal vaccines are safe to have during pregnancy, but should be given prior to pregnancy if possible.

Coadministration of PPSV23 and the herpes zoster (shingles) vaccine does not alter the immune response to PPSV23, although such coadministration may reduce the immune response of zoster vaccine. Consider administration of the 2 vaccines separated by 4 weeks.

Pneumococcal Vaccines help to reduce the number of cases of pneumonia and lessen the severity of pneumonia when it does occur. All those over the age of 65, and many others (with certain medical conditions listed above) would benefit from one or both of these pneumococcal vaccines. For those who are immunocompromised including those on biologic medicines, both PCV13 and PPSV23 are recommended. Feel free to ask your Rheumatologist or healthcare provider to discuss whether these vaccines are recommended for you.