



Specialty Medicine Compounding Pharmacy

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Don't Get Burned!! How to Prevent Sunburn

It's that time of year: the Red Wings win another Stanley Cup, so Michiganders begin to abandon the cool hockey rink for the great outdoors. However, the sun's powerful radiation can cause serious damage to our bodies if they are not properly protected. In fact, the highest amount of radiation from the sun occurs in the late spring and early summer. Not only has the sun's UV radiation been linked to causing skin cancer, it has also been linked to causing cataracts, wrinkles, skin spots, and lip cancer.

Below are some tips of how to protect yourself from the sun according to the Centers for Disease Control and Prevention:

Stay out of the sun when it's the strongest (10am-4pm). However, remember that UV rays can still reach you on cloudy and hazy days.

Use sunscreen and lipscreen with an SPF of 15 or higher. Make sure that the sunscreen blocks both UVA and UVB rays which both can cause serious damage to your body. Reapply the sunscreen as indicated by the manufacturer's instructions. Also, make sure to check the expiration date listed on the sunscreen. If there is no expiration date, the shelf life is usually no more than 3 years. However, exposure to extreme temperatures can shorten the expiration date or shelf life of the sunscreen.

Wear protective clothing

Wear wraparound sunglasses that provide 100% UV ray protection

Avoid tanning beds and sun lamps

Check skin regularly for changes in the size, shape, color or feel of birthmarks, moles, and sunspots. If you notice any changes, contact your doctor immediately as this

can be a sign of skin cancer!

For more information, visit: CDC.Gov

You Can Teach an Old Dog How to Act Like a New Dog with Glucosamine and Chondroitin

It is estimated that up to 25-30% of dogs will suffer from arthritis or hip dysplasia during their lifetime. Osteoarthritis is a chronic, degenerative joint disease that affects both the soft tissues and bones of a joint. It usually begins with damage to the articular cartilage or inflammation of the joint capsule lining. As the disease progresses, the dog usually experiences pain and decreased flexibility in the affected joints. For most dogs, they show only subtle signs of developing joint problems before they become completely incapacitated.

Here are a few signs of possible osteoarthritis development in dogs, for which you should consult your veterinarian:

Lying down more than usual

Reduced activity level

Slow or stiff movements (especially after rest or in the cold weather)

After a dog is diagnosed with osteoarthritis, there are many treatment options for the canine. First, the veterinarian may implement non-pharmacological treatment such as weight control and exercise since this will lessen the weight load on a dog's joints. However, later in the course of therapy, the dog may need to use medications such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) or joint supplements. Joint supplements such as glucosamine and chondroitin have recently been shown to help with dogs' osteoarthritis in a 2007 trial in *The Veterinary Journal*.

In this randomized, double-blind, positive control, multi-center trial, 35 dogs were included to



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assess the efficacy of an orally-administered glucosamine and chondroitin supplement versus carprofen, an NSAID, for treatment of osteoarthritis of the hips or elbows. Glucosamine/Chondroitin Sulfate was given 1 gram twice daily to dogs weighing 5-19.9 kg, 1.5 grams twice daily for dogs weighing 20-40 kg, and 2 gram twice daily for dogs weighing more than 40 kg. Carprofen was given as a 2 mg/kg loading dose twice daily for 7 days, followed by a daily maintenance dose of 2 mg/kg for the remainder of the trial. Dogs were evaluated at days 14, 42, and 70 after initiation of treatment by veterinarians. The results showed that both regimens significantly improved pain scores, weight-bearing and overall clinical condition in a similar fashion. Improvement in symptoms occurred 42 days into treatment for the carprofen group, and at 70 days for the glucosamine/chondroitin sulfate group.

For more information, read: McCarthy G, O'Donovan J, Jones B, McAllister H, Seed M, et al. Randomise double-blind, positive-controlled trial to assess the efficacy of glucosamine/chondroitin sulfate for the treatment of dogs with osteoarthritis. *Vet J* 2007; 174: 54-61.

Estrogen Usage in Urinary Incontinence

Approximately 55% of women over the age of 55 have urinary incontinence. Upon diagnosis, many doctors first take a detailed patient history, which includes any medical conditions that the patient may have along with patterns of urination. Some doctors may then perform more invasive procedures such as a pelvic examination and measuring post-void residual urine volume.

After the medical exam, the doctor will then try to classify the type of urinary incontinence that the woman is experiencing. One common form of urinary incontinence is urge incontinence. The following are symptoms of urge incontinence:

Urge to urinate comes on suddenly and patient feels the need for immediate access to the bathroom

Usually report need to urinate 8 or more times

per day

Uncontrolled bladder contractions occur at night and patient wakes up multiple times to void

Estrogens have been shown to have a positive effect on urge incontinence. Low estrogen levels in menopause leads to atrophy of the supportive tissues of the bladder and urethra. For a woman to remain continent, urethral pressure must exceed the intravesical pressure. Estrogens increase urethral pressure to avoid incontinence. There is also clinical evidence that estrogens have a positive influence on postmenopausal urgency.

A review article looked at 11 randomized placebo controlled studies that examined the role of exogenous estrogens in urge incontinence. The review included a total of 430 women, and found that estrogens were superior to placebo in treating symptoms of urge incontinence, such as frequency of urination and nocturia. There was also a significant increase in first sensation and bladder capacity when compared to placebo. However, the review found that local, vaginal application of the estrogens appeared to be more effective in treating urinary incontinence than systemic application of estrogens.

For more information, read: Robinson D, Cardozo L. Oestrogens and the lower urinary tract. *BJOG* 2004; 111: 10-14.

Watch Our Website For Upcoming Events

Our conference room remodel is completed! With the new space complete we will be begin the process of putting together a program of educational events for you.

We will have some of the same events you have attended in the past that have been so popular. We also want to offer some new and exciting programming. What would you like to see? Email me (kenny@specialty-medicine.com) your suggestions. All who email me suggestions will receive a \$5 coupon that you can use in the pharmacy.