Welcome to another Medical News Report; the last one of 2013. It sure went fast. This is a great holiday month-- Hannakah and Christmas, I hope you enjoy your family and friends. We need a better 2014.

Winter is upon us and a lot of us have gone to Florida, etc. I have enjoyed bringing you the latest information on so many medical subjects. As always, this is information only and not meant to be medical advice. Always seek advice from your doctor, stay informed, be proactive about your health.

1. Sleep Physiology-part 2--Insomnia
1. **Sleep Disorders—Insomnia**

Sleep is vital to health, and we all let our lives get in the way of getting the recommended amount of sleep, however, millions of people can’t get to sleep or stay asleep even when they devote the proper amount of time. **Insomnia** may be one of the most dangerous things that people can experience. As described last month, it takes the deeper stages of sleep to replenish our body, rebuild tissues, and repair damage. Animal studies have shown that brain metabolic wastes are removed during sleep much more rapidly than when awake.

Sleep problems can’t be taken lightly, and yet a small percentage of patients seek help from their doctor with this complaint. Sleep deprivation causes depression, lack of concentration, and would aggravate anyone with even mild dementia. The animal studies described above noted that beta-amyloid is much more effectively removed during sleep. This is the protein linked with Alzheimer’s, when deposited in the brain. Chronic insomnia leads to alcohol abuse, increased smoking, caffeine dependence, and aggravates many metabolic diseases from diabetes to heart disease.

The cause of insomnia is multifactorial. There are many other medical problems that must addressed including restless leg syndrome, sleep apnea and or severe snoring, anxiety, depression, and poor sleep hygiene. Of course, the bed partner can suffer just as much or more. **Obesity** has increased the incidence of sleep apnea. It has also chased the bed partner to another bedroom. I used to have patients come in and tell me they couldn’t even sleep on the same floor as their partner. We have spent plenty of time on this subject (see previous medical reports regarding sleep apnea), but it is a huge problem in getting quality sleep, and sleep apnea is increasing as obesity has.

Over the counter meds are mainly sedating antihistamines (Benadryl), valerian root, and melatonin (only works for those that don’t make enough), and millions of dollars are spent on them. Many of the OTC sleep aids will make you drowsy after you rise in the morning. Add that to drowsiness from sleep deprivation (sleep apnea, restless
legs, stress, and insomnia), and you have a major cause of accidents. A study that recently came out defined a very common triad 1) insomnia 2) restless legs 3) bruxism (grinding the teeth at night). There are huge numbers with all 3 problems. Also, young (19-29) people’s cognition suffers more than older people (50-65) with deprivation of sleep. You really can’t catch up from lost sleep. Some research has pointed out that if you are sleep deprived, a) you are likely to fall asleep listening to something boring, b) caffeine doesn’t give you a lift, and c) falling asleep at night within 5 minutes is common.

If sleep cycles are necessary for the body to replenish our bodies, allow the liver to work, medications to work, detoxify our systems, allow our brain to recover from the day, washing out breakdown products of brain functions, having a good night’s sleep is medically necessary. REM (dream) sleep and the deeper cycles (already discussed last month) are vital to healthy sleep. Several cycles are necessary for healthy sleep.

Prepare your body for sleep. This is called “sleep hygiene”. This is defined as the events we allow when we get close to bedtime. For several hours before bedtime: no caffeine for 4-6 hours, no exercise at night several hours before sleep, no alcohol before bed, no tobacco use, using a computer or doing stressful work late at night, watching action packed TV, having arguments with your spouse, using the bedroom for other than reading, sex, or a calming mood, having irregular times when you go to sleep, taking medications that cause sleep difficulty. Don’t forget a very comfortable bed, low lighting (no blue light), comfortable bed clothing, and a cool environment (about 68 degrees is optimum).

Chronic pain must be addressed for good sleep. Post-nasal drip and reflux will make you cough. Snoring must be addressed if you want to sleep with your mate. Also you should not have pets in the bed (guilty). Blackout shades, no blue lights (interferes with brain waves), low light on the clock radio, and white noise if needed (noise machines, relaxing sounds, fans, etc.).

To produce melatonin in the pineal gland of the brain, we need light during the day. Melatonin is very necessary for sedating the brain and allowing good sleep. Taking it by pill works for many, but not all.

Next month, I will report on prescription hypnotics (sleeping pills), and narcolepsy.
2. The FDA, the US Government, Medicare, and Big Pharma—who is working for whom?

Having spent the last 53 years in healthcare, I have seen the good, the bad, and the ugly in healthcare. I have also seen what our government is capable of (no, I am not writing about Obama-care), our drug industry, and, yes, less than ethical doctors have done to get us in this mess we are in today. One of the most recent issues to bring to the public has been the astronomical cost of new cancer drugs. The average cost of a cancer drug is difficult to define because there are factors such as the length of treatment, the dose, the side effects of individual drugs, and the benefit these new drugs are having on survival of cancer patients with advanced disease. It was not long ago, we had one shot at cancer, but today with multiple advances, more than 65% of patients are cured and hundreds of cancer survivors are alive for years because of medical research. So what is the problem?? The cost has gone out of site in the last 20 years for several reasons, and I have discussed this before. When the cost of a cancer drug is over $100,000 a year, something is wrong. There must be some constraint.

Medical costs are one of the top reasons for bankruptcy. I will quote from the New Yorker and several experts in the field of colorectal cancer from Memorial Sloan Kettering, MD Anderson, and a health economics analyst. A new drug came out to treat advanced colorectal cancer, Zaltrap. It was very similar to Avastin, which stops the growth of vessels stimulated by cancer cells. It was FDA approved, which means Medicare must cover it. The drug Avastin, a few years ago hit the market and cost $5000 per month. This similar drug, Zaltrap, was recently released for $11,000 a month. The FDA had no idea what it was going to cost, because that is not their "business". That means for one year, Avastin would cost $75,000 a year and Zaltrap would cost $303,000 a year. It gave patients an increase of 42 days of life span over Avastin (and other studies show fewer days). Why is it approved when cost reform is on the table.

Why would the FDA approve a drug with that little benefit? Why would a drug company spend millions of dollars to market a drug like that?? MONEY. Once it is approved, Medicare has to pay for it. The Chief of Colorectal Cancer at Sloan-Kettering Institute in NYC wondered why too. He raised hell and all 16 doctors in that department refused to use it. What happened? The drug company, Sanofi, cut the price in half. (The doctors said no to them at any price—good for them!). Then this doctor started to talk to other oncologists and quickly realized most doctors don't have a clue what the drugs they are using, cost!!! This has started a ground swell with cancer doctors and they realized they had to take charge instead of the big 4 (Big Pharma, Big FDA, and Big government-Medicare, and the insurance industry). They are having a summit this month in Wash. D.C. with all the above to discuss this tragic situation that preys on the cancer patients and families.

This all starts with our government putting no restraints on the cost from Big Pharma. Why?? They negotiate drug costs for Medicaid. If this doesn't get you upset, you are asleep at the wheel. In England, Gleevec, a real breakthrough drug in chronic myelogeneous leukemia (CML) cost one third the cost here in the US ($33,000 vs. $99,000) for a 3 month treatment. They are socialized of course, but that should not stop our government from negotiating prices in the U.S for Medicare prices just as they do for Medicaid.
England has a commission called NICE (National Institute of Health and Clinical Excellence). They negotiate all drugs with Big Pharma. They refused to pay for either Avastin or Zaltrap because the drug did not pass the cost/benefit test. WHY DON’T WE HAVE A COMMISSION LIKE THIS? We don’t have to have universal healthcare to have it.

Big Pharma rationalizes that it cost on an average of $1.2 billion to bring a drug to market. Who has seen their books to see those figures? I can tell you, I have seen figures much less. They figure in all their failures into the equation, and that is why the cost is rationalized so high. They also are ignoring much needed new drugs in other areas of medicine, because they can’t get away with charges that high for an antibiotic, for instance.

At present, we are at the mercy of all these beaurocrats. Why have our previous presidents not changed this? It may be up to the doctors….those guys that are getting out of medicine fast as they can because the regulations have smothered them, and at the same time paid them less. Thank your doctor for staying in practice and encourage him to never write a prescription unless he or she knows the cost. We all took the Oath of Hippocrates.....”When in doubt, do no harm”. Harm should include bankruptcy!

Since President Obama got bipartisan support to allow insurance companies to reoffer or keep policyholder’s current policy for another year. Only a few states are going along with it. The state regulated insurance companies are not going to be the scapegoats for Obamacare. Obamacare is an experiment. They have no ideas how this is going to work out. Would the private sector ever try this?

3. Breast Cancer-Part 2-diagnosis

It would be nice to diagnose every breast cancer before it is felt, but even with annual mammograms, there are many that go undetected for months. Being aware of what each individual’s breast tissue feels like during different times of the menstrual cycle is a good beginning. Routine self-breast examinations are no longer recommended for the general public by ACS, but it is still a good exam. Knowing the correct way to examine the breast is very important. Seeing a doctor for clinical breast exams should start in early adulthood. Use circular moves on a self-exam.
The symptoms and signs of breast cancer are: 1) a new lump in the breast or under the arm 2) a thickening or swelling of part of the breast 3) irritation or dimpling of part of the breast 4) redness or flaky skin in the nipple area or the breast 5) pulling of the nipple or pain in the nipple area 6) nipple discharge other than breast milk including blood 7) any change in the size or shape of the breast 8) pain in any part of the breast. See your doctor if any of these symptoms or signs occur.

What a woman should do in her early 20s to age 40 should be decided with guidance from their doctor. Vigilance should be increased with a family history for breast or ovarian cancer, known BRCA genes, if overweight, a smoker, or have diabetes. Young women get more aggressive breast cancers, so talk to your doctor about a plan if a woman is at higher risk.

I am a member of the committee at the American Cancer Society that is working with Duke University Medical Center to review the world literature on breast screening research. Out of this intensive amount of work, we will revise the current screening guidelines next year. There are many factors that must be addressed, especially the harm/benefit of getting routine mammograms, which find spots on the examination that require further studies (ultrasound, MRI), and needle biopsies. This has been publicized recently and has created confusion for women. There is always a risk/harm/benefit ratio to consider, but it is necessary to diagnose cancer early, which has been clearly demonstrated to increase survival. The revised ACS recommendations will be out in 2014.

Breast mammogram technique

Today the recommended test is a mammogram, preferably digital. Below you can observe what a normal vs. tumor in the breast looks like. Calcium tends to accumulate in masses, and calcium shows up on the X-ray. Below is a normal digital mammogram on the left and breast cancer on 3 different exams (mammo, ultrasound, and MRI). Ultrasounds are frequently added to the regimen in women with dense and or large breasts. Fatty breasts are easier to evaluate. Fibrous breasts create significant amounts of tissue that make mammography evaluation more difficult.
Be sure to ask for a digital mammogram if it is available. You can see how much better the digital technique is. Not all breast cancers can be seen on any technique, if they are very small. Don’t be fooled if you have symptoms between mammograms. Go see your doctor!

Comparison of size!

Once a diagnosis is made, there are many factors to consider: 1) cell type 2) grade of tumor-how malignant the tumor is 3) extent-in the breast-size 4) spread to lymph nodes (areas must considered-armpit, internal mammary, and below the clavicle-collarbone) 5) biology of the cancer cell—it is positive or negative for estrogen or progesterone receptors (2 out of 3 are positive for one or both) 6) Does the cancer cell demonstrate a HER2 protein (human epidermal growth factor)-1 out 5 have HER2 protein. 7) Is there any spread to other organs—most common are liver, lung, bone,
Based on these factors and the size, extent of disease, and spread, a stage of disease is made. Based on the stage, a treatment regimen is decided with the patient. Note all the places breast cancer can spread to local lymph nodes:

A-Breast
B-Lateral nodes
C-Armpit nodes
D-Below collar bone
E-Above collar bone
F-Internal mammary nodes (inside ribs)

Other factors to consider are 1) age of the patient 2) still having menstrual periods or post-menopausal 3) other diseases—co-morbidities 4) patient's personal preference. Next month, I will report on the options for treatment based on staging!

4. **Big Changes in the guidelines to prevent cardiovascular disease**—cholesterol, the statins, diet, weight loss, and exercise---already under attack by some

<table>
<thead>
<tr>
<th>LDL Cholesterol</th>
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<tr>
<td>Less than 100</td>
<td>Optimal</td>
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<tr>
<td>100 - 129</td>
<td>Near optimal/above optimal</td>
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<tr>
<td>130 - 159</td>
<td>Borderline high</td>
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<tr>
<td>160 - 189</td>
<td>High</td>
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<td>190 and above</td>
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**VALUES YOU SHOULD KNOW!**
New guidelines were released by The American College of Cardiology. They have come up with 5 new guidelines to prevent cardiovascular disease.

1. Patients should receive statin therapy (high or moderate) if a patient has a history of clinical heart disease. The dosage of the statin therapy is based on age (higher dose for those < 75 years of age; moderate dose if > 75).
2. If initial LDL cholesterol is higher than 190 mg/ml—higher dosage recommended.
3. Diabetics ages 40-75 with LDL cholesterol of 70-189 without clinical heart or stroke disease—moderate dosage is recommended. If the estimated 10 year risk of heart attack or stroke is > 7.5%, higher dosage is recommended.
4. If a patient has the risk of disease equal to or greater than 7.5% or greater over 10 years, OR is diabetic with LDL cholesterol of 70-189 with the risk of 7.5%, moderate to high dosage is recommended.
5. Comment—These recommendations MUST include behavior modifications—diet, exercise, weight management, special counseling for 6 months, diabetic management, and blood pressure management. Don’t depend on statins to do your work! These recommendations are for both heart and stroke risk!!

Discussion:

The new guidelines are based on RISK for getting heart or stroke disease over 10 years!

a. Follow up by your doctor should center on progress overall—taking the statins regularly, staying on target for diet, exercise, losing weight, stop smoking, limiting alcohol, addressing other medical issues that will affect risk. How low one can get the LDL or how high the HDL is not the primary emphasis. This is a big change!!!!!

b. The intensity of treatment (dosage) is based on numerous risk factors (see below). (There is a calculator is for doctors—it is not recommended for patients
to calculate risk without a doctor’s supervision and discussion). There are primary and secondary factors to use in the calculation.

c. The primary factors for calculation are:

1. **Age** (<75 yrs. moderate and >75 yrs. more intensive statin therapy)
2. **Sex** (men have higher risk)
3. **Total cholesterol** level and HDL cholesterol levels at the initial visit
4. **Systolic blood pressure** number
5. **Blood pressure treatment success** (new number)
6. The presence of **diabetes**
7. Being a **smoker**

d. The secondary factors for calculation are:

1. **Family history** of premature heart disease
2. **C-reactive protein** levels—an inflammatory protein marker in the blood involved in the atherosclerotic process
   These inflammatory chemicals that are circulating in the blood, are known to contribute to atherosclerosis.
3. **Calcium** in the wall of the coronary arteries—This was recently emphasized in the medical literature. PET scans can show calcium in the arteries but specialized CT angiograms of those vessels are necessary to calculate how obstructed the inside diameter of a vessel is from calcium buildup.
4. **Ankle-Brachial Artery Index**—this is a calculation between the inside diameter of these two vessels—one in arm and the other in the ankle. This index estimates the risk of peripheral vascular disease and correlates with coronary artery occlusion.

There are other peripheral risk factors such as high triglycerides, erectile dysfunction (it tends to occur 3-5 years prior to coronary artery disease and correlates pretty well). Having gout may be a risk factor since many of the other risk factors are true for the risk of gout. These are from articles I have read, not in the new recommendations.

There is controversy brewing by cardiologists especially the “Ivory Tower” academics. There are accusations of conflicts of interest with the pharmaceutical companies (what is new!), but those that accuse them have their own conflicts (Dr. John Abramson, Harvard lecturer, is a frequent expert witness against the drug companies and even has written a book on “Overdosing America”. However, he makes some good points.

**Statins are effective for people with heart and stroke conditions already present.** The previous recommendations in 2001 used a risk percentage of 10-20% rather than 7.5%. But even at the higher previous percentages, **statins fail to reduce the risk of death from disease** (British Medical Journal). There has never been overwhelming clinical proof that lowering total cholesterol actually reduces disease as much as non-drug activities (exercise, diet, control blood pressure, control diabetes, weight management, control of other diseases called co-morbidities).

He states that it would take a doctor prescribing statins to 140 patients to prevent a single heart attack.

He also points out that **18% of patients on statins at any level (especially high dose) will have side effects** (serious muscle pain and/or weakness, a slight increase in diabetes
(especially with certain statins), cataracts (lots of other factors), and sexual side effects (very difficult to quantify in older men).

His concern for over-confidence in the drug rather than addressing behavioral changes is a concern (80% of heart attacks and strokes are caused by smoking, inactivity, being over-weight, lack of exercise, and not being on the proper diet regimen (i.e. consider DASH and Mediterranean diets). How many times do I need to state this?

With these recommendations, the number of Americans taking statins could climb from 15% to 30%. What a windfall for Big Pharma!

While there is controversy, depend on your doctor using his or her experience to guide what you should do. Get a second opinion if necessary. Remember, these are only recommendations. The concept of using risk factors rather than exact numbers of cholesterol does make a lot of sense to this doctor.

Next month, I will revisit the different statins on the market again and update you on the guidelines as these recommendations are implemented.

5. Short subjects on recent medical advances

A. Depression is the second most common reason for disability, which points to the incredible public health issue it is. Mental health is being emphasized in Obamacare, and that is important. Depression is not just taking antidepressants. It is such a complex disease that requires psychiatric evaluation and treatment. Primary care doctors could do you a disservice by not getting a referral for mental trouble. With coverage, I hope that we as a country we will finally give mental health the attention it deserves.

B. Confusion about the benefit of Omega-3 Dr. Samadi, a prominent urologist on the Fox News television show “Housecall”, on Sunday morning, stated that overuse may be increasing the risk of prostate cancer. A journal article reported that too much omega-3, a potent antioxidant, may actually desensitize the immune system to these normally valuable supplements. It is valuable to improve mood, energy, strengthen heart function, reduce triglycerides, but should be eaten in foods rich in them rather than taking them as a supplement. The DHA and EPA are found in fish oils, which decrease inflammation, but too much may promote the oxidative process, which is a known issue in cancer genesis. On the other hand, I just read a paper that stated Omega 3 fish oil decreases recurrence in prostate cancer patients. This makes it important to talk to your doctor about taking fish oil or any other supplement.

DNA & Cancer
C. In follow-up to my discussion on genetics and cancer last month, I should point out that even though only 10% of cancers have a genetic basis, an article in the Journal of Nature reported that there are disruptive changes to the genetic code in 97% of the 30 most common cancers. This is research material and will someday guide more therapies—just not yet in most cases. Hidden within the genome are signatures that cause most cancers to form, so in our DNA lies the secret to cancer, and other diseases and that is how we will conquer them someday. The FDA had put a stop to an internet site for a genetic testing saliva kit 23andme, because it is in violation of illegally selling medical tests not approved by the FDA. Don’t be fooled by these tests. Genetic testing should be guided by medical experts so that abnormal tests can be appropriately discussed and managed. Don’t order it! Guidance regarding genetic testing is a must!!

D. Low-T -

3% of men over 40 are on testosterone therapy of some kind. None is better than the other....it depends on your preference but topical treatment gives more consistent levels. The standard for Low T is less than 300ng/ml and normal can range from 300 to 1000ng/ml. Getting older means less strength, energy, increased fatigue, decrease in mental focus, and less interest in sex, but is it all due to Low T? Maintaining an erection may or may not be from low testosterone levels, and in fact, blood flow issues are frequently the cause. Blood flow issues certainly play a role in patients with cardiovascular disease, diabetes, and those with high lipids. ED can be caused by many medications (antihistamines, blood pressure meds, statins, prostate meds, antidepressants, hormonal therapy, etc.) It is really important to discuss this with your doctor before taking testosterone replacement, especially since recent studies have shown risks including cardiovascular disease, diabetes, and cancer. There are also other side effects from taking too much testosterone—acne, shrinkage of the testicles, larger breasts, decrease sperm, increase in red blood cell count, and increase in stickiness of platelets. Even just replacing low T aggravates obstructive sleep apnea, hypertension, weight gain, prostate enlargement and can fuel prostate cancer (not necessarily cause it).

However, if significantly low, replacement therapy may be very valuable in returning sex drive, improving energy, etc. If on male hormone replacement, the hormone level needs to be measured at 3 and 6 months, a bone density needs to be tested after 2 years, and certainly monitor for prostate cancer. Replacement comes as injections (cheap), patches, topical sprays and gels, and even a buccal (inside the cheek) patch in the mouth and subcutaneous pellets can be injected every 3-6 months. All these applications will cost you close to $500 a month and Medicare will not cover it. It is clearly a difficult decision based on many factors, and must be discussed with your doctor and/or urologist or endocrinologist. I will report on the workup for erectile dysfunction and expand on the finding that it correlates with coronary artery disease. I will outline all the treatments for ED with videos.

E. Facts--1000 young people become regular smokers every day. E-cigarettes are the latest attempt to provide nicotine (and other illegal drugs) to Americans especially those under 40. The number of uninsured children in the US had dropped from 9.3% to 7.2%.
F. The differences in TEA—there are 3 types of teas 1) black tea 2) green tea 3) Oolong tea BUT they are all the same tea leaves. It is just a matter of processing. Black tea is exposed to air or fermented, which darkens the leaves and gives them flavor. Green tea is made by heating the leaves quickly steaming the leaves. Oolong tea is partially fermented. There is no hard evidence that tea can prevent cancer. There needs to be more research. However, there is research to support some evidence that it reduces the risk of heart disease. It can assist in weight loss, blood pressure and cholesterol absorption. This evidence is not good enough for the FDA allow health claims on packaging. Green tea may control blood sugar levels, but more research is needed. Black teas with meals can decrease absorption of iron from the foods by 79-94%. It should be noted that herbal teas are made from special plants (Camellia sinensis). They are an infusion of leaves, roots, bark, seeds and flowers but there is NO health benefit. Brewing teas retain the most antioxidants and one needs to steep the tea for 3-5 minutes to retain the oils of the leaves. Brewed teas are better for you than instant or bottled teas. Bad news! Iced teas have negligible amounts of catechins, and are diluted by all the ice, but can be overcome if the tea is double the strength when brewed. Sweetened iced tea frequently has 60 gms of sugar per glass. The South needs to get over presweetened tea---it is full of unnecessary calories.

G. Food Frauds—Smoothies are wonderful for you but they are packed with calories. Use fresh fruit. Fruit concentrates are frequently used in retail with ice cream, sweeteners, and therefore no better than a milkshake. They are easily 350 calories per 8 ounces and have little protein. Use probiotic packed low fat yogurt and skim milk. I use wheat germ, flax seed or some grain to lower cholesterol. Energy bars can have up to 1500 calories. Enhanced flavored water has 125 calories. Lattes contain approximately 580 calories and 15 gms. of saturated fat in 20 oz. Breakfast muffins can contain up to 500 calories and a tsp. of sugar.

H. Life's Simple Seven—1) stop smoking 2) Get active (150 minutes per week) 3) Eat better—fill plate half full with vegetables and fruit 4) Maintain a healthy weight (women-waist less than 35 inches, men-less than 40 inches) 5) Reduce blood sugar with less raw sugars, white foods, less starches, and more whole wheat 6) manage blood pressure 7) control cholesterol Follow the simple seven, and drop your risk of heart disease and stroke by 55%.

6. Lumbo-Sacral disease—Low back pain

Low back pain may be the most common human condition. Consider that gravity is constantly putting force on the spine our entire lives, and without a good structural spine with good cushions (discs), we are in for some serious trouble over our lifetime. The most common reasons for low back pain are lifting heavy objects, sports injuries, on the job injuries, being overweight, heredity, and not exercising. The curvature of the spine (see drawing below) must be maintained with strong abdominal and back muscles and ligaments. Without that strength, we are set up for constant abnormal tension on the spine that is the cause of osteoarthritis (plus heredity and injury), which is the “wear and tear” type of arthritis. Improper technique for lifting, infrequent overuse of the back, golf swings, poor shoe support, bad posture, etc. will set you up for trouble.
There are a variety of remedies for generically treating simple back pain (Aspirin, Tylenol, NSAIDs - i.e. Aleve, Ibuprofen, hot packs, cold packs, rest will all help. But if those simple remedies don't help, and your pain persists, you need to see a doctor (MD, Chiropractor, Orthopedist). This is true especially if your pain exists in your hip or down your leg with or without weakness. The **sciatic nerve (see drawing below)** is the anatomic name for the combination of nerves that come out from your lower lumbar and sacral vertebrae. If these nerves are compressed (disc, arthritic spur, or stenosis), usually conservative treatment is started with muscle relaxers (Flexeril, Soma Compound, and Valium), non-narcotic meds, heat and/or cold treatments.

**View of spinal cord and nerve  sciatic nerve  Normal curvature of the spine**

If conservative treatment and time does not help greatly, an evaluation is indicated especially if the back pain is radiating down into the hip or leg, it could be “sciatica”, the common name. Lumbago is an old term used.

The sacrum is the part of the vertebrae that forms the back of the pelvic bone. See drawing below. Not there is no movement between these vertebrae like the other vertebrae. A spinal nerve can be pinched by a spur, a ruptured disc, or narrowing of the space the nerve travels through between vertebrae. Spinal stenosis can press from the inside of the vertebrae and pinch nerves and or the spinal cord.
Sciatic pain can be felt in the buttocks or a burning sensation and/or numbness all the way down the leg to the foot. This type of pain can also occur from a congenital deformity—see below (spondylosis, spndylolesthesis, etc.) or from a vertebral fracture caused by cancer, osteoporosis, or trauma. It can even occur from a metastatic or spinal cord tumor. That is why an evaluation is important. If there is any evidence of lower leg weakness, loss of bladder or bowel control, it really needs immediate attention.

Distribution of nerves to specific areas of the body! Note that each spinal nerve serves a specific area on the skin. Testing for numbness will help the doctor define the level of the problem.

An MRI (magnetic resonance image) scan is the test of choice if there are specific abnormalities indicating a radiculopathy. Examine these photos, as they are the common causes. Next month, I will report on the next steps usually recommended such as referral to an Orthopedic or Neuro-surgeon, pain management specialist, physical therapist, etc. Just because you are referred to a surgeon, does not mean they will jump to surgery. Surgery is the last resort.
Stay healthy and well my friends!

Merry Christmas and Happy New Year!

Dr. Samta