

The Sky Valley Medical Report-4-May 2012

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The May Medical Report includes an email about the signs of stroke. These are slides, so just scroll down to view all the information about these critically important signs that someone might be having a stroke.

The subjects covered for this month are:

1. SIGNS OF STROKE—SEE E-MAIL for the signs
2. IS SUGAR TOXIC?
3. OBAMACARE AND MEDICARE; WHAT ISSUES OF HEALTHCARE ARE BIPARTISAN?
4. TREATING CHOLESTEROL WITH THE STATINS

1. THE SIGNS OF STROKE (ISCHEMIC and HEMORRHAGIC)

- a. A STROKE is a blood vessel event that can come usually from a blockage of an artery in the brain. It comes from the same process that occurs in any vessel from ATHEROSCLEROSIS that comes on silently over years of buildup of platelets, clotting factors, and cholesterol called a PLAQUE that narrows a vessel beyond a critical size so that the brain tissue it supplies can't function. Recent research has shown this entire process starts as an INFLAMMATION on the inside of the vessels. The cause is from several causes that will be discussed in the future. The most common type of stroke is---ISCHEMIC STROKE. Depending

where it happens, you will see the signs of stroke nicely outlined in the addendum email. Please look at it!!

- b. A subtype of ischemic stroke can happen from an EMBOLUS. This means a clot or part of a vessel wall or a heart valve slips off and travels to a vessel that might block it suddenly or over time. ATRIAL FIBRILLATION, which is a type of heart rhythm irregularity can predispose you to create a clot on the atrial valve which can cause an embolus. If you have this irregularity, you will be considered for aspirin or other types of drugs (i.e. Plavix) that thin the blood and help prevent this clot from forming and moving to the brain or other organs.

- c. The other type of stroke is HEMORRHAGIC, which means a very small BLOOD VESSEL RUPTURES and bleeds into brain tissue. Less common, but certainly serious, it is important to know which type of stroke a patient is having because of the DIFFERENT treatment options. Giving an CLOT BUSTER (ENZYME) to break up a clot would not be an option if one has had a brain hemorrhage. However, it is the treatment of choice for ISCHEMIC STROKES.

- d. Remember, time is of the essence in getting to the ER, getting properly diagnosed and treated. The first 2 or 3 hours is critical!

- e. The same risk factors increase the likelihood of a stroke as a heart attack—1. DIET 2. OBESITY 3. Elevated FATS in the blood 4. GENETICS in the family 5. SLEEP APNEA 6. LACK OF EXERCISE 7. HYPERTENSION 8. AGING 9. HEART DISEASE or HEART RHYTHM IRREGULARITY 10. USE OF TOBACCO 11. DIABETES. Each of these factors REQUIRE expansion in future medical reports.
- f. Here are some COLD HARD FACTS: Stroke is the 3rd leading cause of DEATH!! There is a 25% chance of a 2nd stroke within 5 years of the first, and 1 in 10 stroke patients will develop DEMENTIA within a year. There are 600,000 strokes diagnosed each year, and I would imagine if more concern for the risk factors were SERIOUSLY addressed, we could prevent a huge number of these CVAs (cerebrovascular accident) and drop the cost of healthcare by billions. (Journal Watch-Neurology 2012)
- g. This information can be found from the National Institute of Neurological Disorders and Stroke.

2. IS SUGAR (STARCH) TOXIC ?

- a. Are there good sugars and bad sugars?
NO! The common ones are glucose, fructose, sucrose, dextrose and maltose. Dr. Robert Lustig, a Pediatric Endocrinologist, at UCLA-San Francisco in a good article in the NY Times (and can

be seen on you- tube titled “The bitter trouble”) feels very strongly that sugar is a toxin to our body.

b. What is corn syrup?

CORN SYRUP is a food syrup, which is made from the starch of maize corn and contains varying amounts of MALTOSE and COMPLEX SUGARS, depending on the grade. There is also high FRUCTOSE corn syrup, which is created when corn syrup undergoes an enzymatic process making it much sweeter. Neither sugar is safe! GLUCOSE syrup can be made from any source of starch—wheat, tapioca, and potatoes. CANE sugar is just more expensive.

c. If it is natural, is it safe?

High FRUCTOSE corn syrup is called NATURAL by the FDA, but that just means there are no additives. There is no healthy corn syrup and no sugar alternatives , however most of the artificial sweet substitutes are safe. The food industry is replacing FRUCTOSE corn syrup with SUCROSE sugar, and this is dishonest BY SUGGESTING THAT IT IS SAFER. These sugars are biologically identical and metabolized the same. REFINED sugar is nothing more than a molecule of GLUCOSE bonded to a FRUCTOSE molecule. The food industry has become an enemy! And who let in the fast food industry?—our government and us? We are the enemy!! Our lifestyle is killing us.

d. What about HONEYBEE HONEY?

Honeybee honey is 80% sugar and 20% water. Fermented honey is called mead, an ancient alcoholic drink. It will NOT allow bacteria to grow in it and produces natural hydrogen peroxide, so it works on superficial wounds and was used to embalm bodies in ancient times. Because bacteria can't grow in honey, it does not need refrigeration.

e. Why are sugars toxic?

It can harm the LIVER, is linked to METABOLIC SYNDROMES, elevating TRIGLYCERIDES (by interfering with lipoproteins), decreases HDL- cholesterol (good fat), can create INSULIN RESISTANCE, and lead to DIABETES. It interferes with immunity by creating problems with interleukin 6, tumor necrosis factor 1 & 2, and increases a substance called c-reactive protein, all of which are inflammatory markers for atherosclerosis. IT IS NOW KNOWN THAT THE BEGINNING OF ATHEROSCLEROSIS STARTS WITH INFLAMMATION IN THE ARTERY WALL. Talk to your doctor about testing for c-reactive protein and other indicators of risk for vascular disease. We will look at those tests next month.

f. How can we cut down on sugar in our diet?

Moderation is the name of the game, and when you eat sugar-laced- foods, make it a good one. Some carbohydrates are essential for a balanced diet, but colas and sweetened drinks are OUT!!! You can't rationalize drinking sugar-containing drinks on a regular basis. LIQUID fructose/glucose drinks hit the

liver so fast it converts to fat immediately because it doesn't have time to metabolize. If it has sugar in it, let it be a natural fruit juice (no sugar added), potatoes, white rice (switch to brown rice), or corn, and that goes for kids too! Remember white bread is sugar, so eat the brown breads. SOLID foods with sugar in them are absorbed slower, so the liver has time to metabolize most of it. This is why it is a better alternative for you. But in the end, use common sense about the intake of sugar. Artificially sweetened drinks are ok as far as sugar, but they eat the enamel of teeth. There are studies that even condemn them, because it is thought that those who drink a lot of artificially sweetened drinks tend to over-eat (Super-size that burger with your diet coke!).

g. What risk does sugar gives us?

MedPage.com quoted a 20% increased chance of a heart attack when ingesting as little as a daily sugar drink.

h. How does sugar create obesity?

I mentioned when sugar is metabolized rapidly it is converted to fat, but it also causes insulin resistance, which is the beginning of creating TYPE 2 DIABETES and is a fundamental cause of OBESITY. When INSULIN RESISTANCE occurs, insulin does not lower blood sugar, so the pancreas puts out too much insulin and you CAN get hypoglycemic. That may be a sign you might be at higher risk of developing type-2 diabetes.

i. Does sugar cause cancer?

Dr. Lustig also feels sugar plays a role in cancer. Inflammatory processes and insulin resistance seem to promote cancer cell development. With insulin resistance, more insulin is secreted and that has been proven to promote tumor growth. Obesity is now the number 2 cause of cancer, and with insulin resistance highly likely in them, one can begin to understand how sugar plays a role. I hope you are following this! This is all fairly new stuff!!!

- j. Why don't the federal government and health organizations educate the public about the dangers of sugar?

The Institute of Medicine could not agree with the upper limit of normal intake of sugar in the diet in 2005, and the FDA has not addressed it since 1986, giving a green light to the industry. The author of the study that recommended limits of safe intake in 1980 has been an paid advisor to the Corn Refiners Association since 1986. When we want help from the government, where are they?

- k. What are the recommended limits of sugar intake?

The limit of sugar recommended in 1986 was 40 POUNDS per year. Computed into the allowable sugar per day...that means you are allowed the equivalent of one half of a can of cola per day for a year. The average American consumes 75 POUNDS of sugar a year. In 1980, 1 in 7 Americans were obese, now 1 in 3. In 1980, 6 million Americans were diabetic, and now 14 million Americans suffer from diabetes. 22% of the calories we take in today are

sugar. Is that too much? Yes! Children should not take in more than 10-15% of their total calories as sugar. A lot more studies are needed to convince our government and the public of these facts and to come down hard on the food industry to help the public with this obsession for sweet food.

l. Why do we crave sweets?

Cues are part of the reason—visual, memory, and associations with pleasure and sweets all play a role. The anterior part of your tongue senses sweet, so it is the first thing to sense when food sweets go in our mouth. The cue activates dopamine, a neurotransmitter that pushes you to seek out sweets. Over time the feel-good experience rewires our brain so we “crave” the substance, just like drugs do. Also, it is now known that it triggers hunger. You become powerless....in the presence of sweets. So craving happens at once, and it takes 12 or more minutes for the satiety (feeling satisfied) center kicks in. EAT SLOW! That is what TV commercials are all about. By the way, this brain phenomenon goes for other desirable foods especially fatty foods.

m. So where do you start?

CUT OUT THE SODAS. Losing weight is more than just dropping the calories.....it is about the balance of carbs, fats, and protein, exercising, and seeing your doctor to manage any medical issue you have. Eat fresh fruit, and solid starch foods so that the body can use it more efficiently. So much for your sweet tooth!

3. MEDICARE REFORM AND OBAMACARE. WHAT ARE SOME OF THE HEALTHCARE REFORM ISSUES THAT THERE IS BIPARTISAN AGREEMENT?

- a. President Obama, at the beginning of his presidency argued that healthcare was the main reason for spiraling debt, and therefore pushed through the most drastic changes we have seen in modern times. There are good parts and awful parts, NOT TO MENTION MANY NON MEDICAL ISSUES LIKE STUDENT LOANS THAT WERE INSERTED IN THE BILL. Even this week, we have seen that Medicare will go into the red even sooner than estimated. If the two sides of the isle were able to work with each other, we could have agreed on the reasonable necessary parts of healthcare reform and incrementally created a much more desirable AFFORDABLE plan. As it was and is, Obama, with a Democratic House and Senate in his first 2 years, shoved over 2000 pages of change down our throats. Now OVER HALF of the country does not support the legislation, and the mandate issue is the hands of the Supreme Court. Obama said this was an affordable and efficient way to change health care. He had no studies or pilots to prove his point. In fact, some of his pilots now have proven it will cost more than what we are spending now, and he wants to add \$33 million uninsured people to Medicaid!!!! GOOD IDEA IF WE COULD AFFORD IT, but we can't and sure don't have enough doctors to treat them. Now after the smoke and mirrors have cleared, it will cost \$1.76 trillion dollars from now 'til 2022, and those figures are from the Congressional Budget Office. When you

get a bunch of college academicians together in a room and let them come up with reform, this is what you get. Who asked the people out in the field, the doctors, the hospitals about their thoughts? This is what you are getting with a Cabinet full of academicians and no one from the private sector. This is not in our best interest.

- b. Obama is already planning to add another \$6 trillion to the national debt over the next 10 years, according to David Brooks from the NY Times. By 2022, Americans will be paying \$915 billion on interest payments on the national debt, larger than the defense budget. If we go with the Ryan plan for Medicare, his budget will cut total public debt to 10% of GDP, still not great. Current law would put total debt at 42% of GDP. Under the Obama budget, which includes healthcare, the budget will skyrocket to 124% of GDP, also according to Mr. Brooks. One definition of a Democrat is a person who strives for fiscal accountability and sustainability. Where is it?
- c. We have a huge problem in this country with excess, and both political parties agree on this. They both agree healthcare reform is necessary, and I would like to enumerate the following 4 points outlined in the NEJM (New England Journal of Medicine) this year from Gail Wilensky PhD.

1-----Both sides agree on the need for increasing the age of Medicare beneficiaries from 65 to 67. However, that won't help for awhile, since younger seniors are not the costly problem. But over time, since 78 million baby boomers will turn 65 over the next 18 years, it would be a good place to start. Realize poor seniors are subsidized greatly (75% of premium) for Medicare already, so don't think the poorer seniors are being left out an additional 2 years. (Disability and aid is also huge problem in this country and needs to be addressed in a future medical report).

2-----Both agree on tying benefits of Medicare to income. If you are one of those folks Obama calls a "fat cat", you will pay more for Part B (doctor bills), and D(drugs)....probably a lot more since I have already seen figures on the doubling and tripling of the premiums over the next few years. Both plans (Obama and Wyden-Ryan plan) agree more or less on this. Understand, not all Repubs are behind the Ryan plan yet, but reform has to happen. Ryan wants to leave you alone if you are already over 55, and Obama wants to take \$6 Billion from Medicare now. Somewhere in the middle lies the answer.

3-----Medicare is an open-ended entitlement now (the feds pays all the bills regardless of amount), but both sides agree it can't be sustained. Vouchers, predetermined payments to private insurance, or trimmed up Medicare for seniors will have to be addressed to offer choices to each beneficiary for fairness. In other words, you are given a certain amount of

money to spend on healthcare each year. If you have a “fat cat” policy, Obama wants to penalize you even more by charging you a sales tax. If you shop around and find a less costly plan, you get a pat on the head, but WILL YOU GET THE SAME COVERAGE?? Probably NOT! So once again you get penalized if you were fortunate enough to have made good money in your life, especially over a taxable \$250,000. Some say Obama will change that figure to \$100,000 after the election if he wins. (Who gets hurt?? Small businesses). Both sides agree that the growth rate of Medicare per year should not exceed GDP plus 1%. The Independent Payment Advisory Board (IPAB) is the 15 man group appointed by Obama will decide who gets paid what (doctors, hospitals, home health, durable medical equipment, etc.). The GOP hate this idea, since they are appointed by Obama. This gives a tremendous amount of power to these appointees!! This is dangerous, but some overseeing body will have that job regardless of who is in power. But it should be fair and balanced!!!

4-----The current system of fee-for-service needs changing and both sides agree. It does not address quality of care, efficiency, and coordination of care especially for seniors with multiple chronic diseases. Bundling services, payment for results rather than numbers of procedures, etc. are all being addressed as alternatives. Currently, the average spending per senior has exceeded the growth in per capita GDP by plus 2.6%. Remember, both sides want it at plus 1%. This means you better stay well, quit seeing the doctor for every cold, and do

everything in your power to stay out of the operating room. I am serious, WE HAVE AN OBIGATION AND RESPONSIBILITY TO GET IN BETTER SHAPE, LOSE WEIGHT, EAT BETTER, FOLLOW DOCTOR'S INSTRUCTIONS, AND GET TOUGHER. If you don't, you are going to be in for a big surprise, when your doctor refuses to treat you because of your other diseases. You think I am wrong?? You know I am right. It is called RATIONING OF CARE, but it makes the doctor the bad guy, because he has refused to treat you.

d. What about Medicare spending over the last few years?

Medicare spending is slowing already because the insurance industry knows these changes are coming. Cutbacks have been quietly happening. Remember when you could hang around the hospital an extra day, because you didn't feel like going home yet or your mate couldn't get off work til after 6pm? Now you have a case manager kicking you out the door the next day. Medicare spending is still way too costly, even though the adaptations are already happening. Since I was in practice, Medicare always lead the way in cutting payments to doctors and all insurance companies followed suit. This is nothing new.

e. Where is the competition for the healthcare dollar?

We need competition for healthcare just like any industry and it will lower the cost. So get ready. You shop for cars...you will soon shop for medical care, because you will only get a certain amount of money to spend before it comes out of your pocket.

It is important to note, with the revised Ryan plan, as opposed to a year ago, you will still have the option to choose the traditional Medicare fee for service plan, but if Obama is around you will be supervised by that 15 man group I spoke about. The Ryan plan won't touch Medicare for anyone over 55, and will give you more options. Competition is good no matter who is paying for Medicare. What is wrong with that?

- f. What are you going to pay for Medicare in the coming years?
You will pay between \$220-240 more each year for Medicare, as recommended by that IPAB 15 man group.
- g. The concern about more OUT OF POCKET COSTS for seniors is the big controversy. I believe it will happen regardless of the plan. Co-pays for surgery, home healthcare, durable medical equipment, etc. will jump, and by type of medical provider you choose to see (higher co-pay for specialists), which will reduce your desire to see them unless absolutely necessary. If a federal study decides the procedure or treatment does not improve your longevity because you are over 70, you will pay a higher co-pay. This is cost-containment and another way to limit RATION CARE.
- h. Secretary of Health Sebellius, has the power to override the IPAB-15 man group of the plan if she desires. That is a lot of power!

4. TREATING HIGH CHOLESTEROL WITH STATIN DRUGS

- a. The statins are a class of drugs designed to lower your cholesterol. The drug blocks a substance (HMG-CoA reductase) that your body needs to make cholesterol. It also has been touted as a drug that can reabsorb cholesterol out of the plaques in the artery wall that blocks vessels. It is recommended in all forms of what is called dyslipidemias, which commonly includes elevated triglycerides.
- b. There are several on the market. Your doctor will have preferences based on your needs. Unless there is a generic equivalent, they are expensive. The generics are just as good.
- 1-simvastatin- (Zocor)-has a generic
 - 2-lovastatin-Mevacor
 - 3-pravastatin-Pravachol
 - 4-rosuvastatin-Crestor
 - 5-atorvastatin-Lipitor- has a generic
- c. What can we do before taking statins?
- One must understand, if you expect your cholesterol (and triglyceride) to be maximally lowered, YOU MUST add these statins to a reasonably good diet (less saturated fat, red meat, processed meat, eliminate sugar and white bread, over half your meal consisting of fruits and vegetables and limiting total calories—see www.myplate.com , and limit alcohol (ouch), Exercise 30 minutes a day (not just walking to the refrigerator), and lose weight (BMI- height and weight- less than 30., Manage hypertension, diabetes, and stop smoking. Doctors DO NOT hit you hard enough with these recommendations, and if your

doctor is fat, he won't even mention it (studies to prove it). It is a LIFE STYLE CHANGE. We all try and fail frequently, but you can still cut out colas, white bread, use olive oil for cooking or canola (other oils that are unsaturated are even better), eat more chicken, fish, eat lean red meat cutting out the processed meat, eat half of meal in fruits and vegetables, and limit stress(easy to say). Hey, I am just reporting the information!!

d. The monitoring of the good and bad cholesterol (HDL, LDL, non-HDL-C) and triglycerides must be done to check the statin effectiveness. We will explain these blood tests and what they mean regarding risk NEXT MONTH.

e. Why do we need fat in our diet?

They are very important in the formation of cell membranes of all cells, especially the brain, are needed to make human cortisone by the adrenal glands, Vitamin D, and bile (excreted by the liver, stored in the gall bladder and used in digestion). There is good fat(HDL) and bad fat(LDL) (yes Dorothy!), and the good fat actually lowers the risk of cardiovascular disease, but the bad stuff coats our vessels, clogs our liver, and stores in all organs. Since we all take in more than we need, we have to have a good liver to metabolize it (just like sugar), otherwise, it gets in our blood stream and contributes to the formation of plaques to block our vessels.

f. Why are there good and bad fats?

The bad fats (LDL-low density lipoprotein) cause vascular disease, we have to lower the bad fat. It is about the size or density of the lipoprotein that carries the fat that determines whether it is good or bad. HDL-high density lipoprotein will lower cholesterol. Hence, we need the statin drugs to help lower the LDL. At best, they will only lower the fats by 40-50%, so we are still looking for other drugs to help. Good news!!! There are results of studies just reported in the Journal of the American Medical Association using a biologic called monoclonal antibody that can lower the fats, along with the statins, 40-72%. But that is for tomorrow!!! This is very encouraging.

g. How do the statins work?

The statins work by blocking a substance (HMGCo-A reductase) your body needs to make cholesterol by the liver. It can also reduce deposits of cholesterol from forming and possibly reverse it in our arteries, reduce heart attacks and strokes, and prolong your life. You can lower your risk some 20-30% by keeping your fat (lipids) levels normal. Keep in mind GENETICS play a significant role in you having the problem in the first place, but so does your diet and all the things I mentioned above.

h. What are the side effects?

These are drugs that help, but they have some SIDE EFFECTS. The biggest one is death of muscle tissue (rhabdomyolysis), which can be serious. It is rare fortunately. It can also damage your liver,

upset your stomach, and cause joint and muscle pain. Call your doctor if you experience fatigue, weakness, loss of appetite, dark colored urine, yellowing of the skin and whites of your eyes. Do not take statins with grapefruit or grapefruit juice (can actually increase the absorption and cause toxicity), or if you are taking erythromycin (Z-pack), antifungals, and AIDS drugs. Recently it has been found that statins raise your blood sugar (doesn't mean you can't take statins), and can interfere with your memory and cognitive functioning (they are reversible).

- i. For years, it was recommended to monitor your liver enzymes for toxicity every 3-6 months, but now that has CHANGED....ONCE IT HAS BEEN ESTABLISHED THAT THE LIVER ENZYMES ARE OK WITH INTERVAL CHECKS, ROUTINE TESTING IS NOT RECOMMENDED. Talk to your doctor.
- j. There are other drugs you can take along with statins like Zetia(ezetimibe), Niacin, and Omega-3 fatty acids however, there are recent studies that disprove the benefit of Zetia and Niacin when added to the statins. Ask your doctor about these drugs. Also the use of high doses of Omega3 fish oil (high in fish) is recommended. The prescription (Lovaza-1 cap equals to 12 caps OTC) should be discussed with your doctor especially if your triglycerides are elevated.
- k. There are some side BENEFITS too. There are studies to prove that statins decrease the risk of arthritis, and fractures,

decrease the incidence of GI cancers, and for some reason reduce the risk of kidney disease. I am not sure we know why, Alzheimer's (even though a side effect can reduce memory and cognitive function---go figure).

- l. The statins decrease the levels of CoQ-10 in your body, which is an important substance to maintain the mitochondrial function of all cells. So 100mg. daily of over the counter supplement is recommended. ASK YOUR DOCTOR IF YOU SHOULD TAKE IT.
- m. Red Yeast Rice is commonly used to mildly reduce fats in the blood, but the reports are not great. Certainly you can take this in addition to the statins. ASK YOU DOCTOR.
- n. Once on these drugs, you are on them for life. The blood fats need to be monitored to see if they are doing any good. Increasing the dose is up to your doctor.
- o. I know this is a huge amount of information, but you need to know about this since millions of Americans are taking them.

This completes this month's medical report. I hope this information is valuable. By the way, this is ORAL CANCER AWARENESS MONTH, so make sure your dentist is looking at your mouth, tongue, and feeling your neck when you go. Oh, by the way, when was the last time your family doctor looked in your mouth and throat during you're an annual exam?

Next month, I will include a discussion on the monitoring of the blood for lipids (fats), and what they mean. I will have more on the healthcare debate, looking at supplements from the drug store, and other timely information on disease. Enjoy this beautiful spring. God bless!

Dr. Sam