MARCO's "*AETHER*" *Pronounced "Ether"*
Medicine & Radio in One Medium
Official Publication of the Medical Amateur Radio Council

114th Edition
2000-2018

A non-profit Corporation, founded in 1965, privately supported for the public good and dedicated to the advancement of Medicine through Amateur Radio.

Marco Blogsite: marco-Ltd.blogspot.com
"listserve": *http://googlegroups.com*

Web Site: http://www.marco-ltd.org
Internet address: warren.brown1924@gmail.com

Vol. XXXXXII, (52nd year), Edition # 114 Since Year 2000, Dec.. 2018 **P.O. Box 127, Indian Rocks Beach, FL., 33785-0127**

"DOCTOR, ARE MY MEDICINES SAFE?"

WHAT ARE THE PROCEDURES FOR THE FDA TO DETERMINE IF A DRUG IS SAFE FOR HUMANS & WHAT HAPPENS IF THERE IS A SAFETY FACTOR LATER ON. WHO IS SIDNEY M. WOLFE, M.D.?

Presented on Marco Grand Rounds of the Air July 22, 2018
****

Drug development is the process of bringing a new pharmaceutical drug to the market once a potential compound has been identified through a **drug discovery.** It includes pre-clinical research on microorganisms and animals, filing for **regulatory status,** such as via the U.S. FDA for an **investigational new drug** to initiate **clinical trials** by the applier on healthy young humans and may include the step of obtaining **regulatory approval** with a **new drug application** to market the drug once the clinical trials have been completed.

Simplified: 1. Drug discovery. Pre-clinical research having been performed (*chemistry, solubility, packaging, toxicity).*2. Filing for regulatory status with the FDA as a "investigational new drug." 3. The company gets approval to start clinical trials which consist of: Phase One—usually takes 1.7 years on healthy volunteers to determine its safety. Phase two—usually takes 1-5 years to determine the safety of the drug in small numbers in those with the targeted disease. Phase Three—usually takes 3-7 more years, using large numbers of people with the targeted disease. ON passing all above, the company applies for a **New Drug Application (NDA).** This takes up to 10 years and costs on average of about $900 million dollars, based on confidential information controlled by drug companies.

The drug is then approved. Following approval, deaths occur and the following drugs are just some of which have been removed from the market: Lamisil (anti-fungal), Vioxx (more powerful aspirin), Propulsid (gastritis drug), Rezulin, Baycol, Darvon, Darvocet, Seldane, Hismanal among many others.

You've seen the commercials on TV. Lots of people enjoying life, now that the latest "*miracle drug*" has done its work. And they all end up with what advertiser refer to as "call to action: a directive to you to "*ask your doctor."*

Even in the best of cases, it may not be the healthiest idea to have patients going to doctors to ask for specific drugs. In what is, perhaps a misguided application of the "*the customer is always right*," doctors will often prescribe a requested drug, as long as they don't think it can hurt. There may be something more effective, or less costly, but the drug companies spend all that money on advertising for a reason. That's the best case.

And the worst? You may have noticed that many of those drug commercials have lengthy sections during which the voice-over announcer drones on about side effects. You're seeing happy healthy people. But you're hearing about potentially harmful results...dangers that sometimes far outweigh any benefits you may get from the drug.

Some drugs are not dangerous by themselves, but they can be deadly in combination with other drugs. There are many dangerous combinations:

Continued on Page Two

LATE BREAKING NEWS

Marco Secretary Dr. Joe Brault reminds members to use the new online system for dues payments (*all dues due on Jan. 1, 2019).* You will receive an email invoice for dues on Jan. 1, 2019. If there are any errors in the online billing or if you don't get it—email *secretary@marco.ltd.org. (As the system is only as accurate as our email lists).* That is, if some still prefer to send checks to the secretary, they can still do that.

NEED CATEGORY I CME?

Go to www.mpmcme.org enter; go to "medical surgical archives" and a list will pop up...pick the lecture you want (includes mandatory ones) & when completed take the simple test and submit it to"Lee" for accreditation. When your medical license is up for renewal, notify Lee & she will submit the papers required. Tell her you affiliated with the hospital through MARCO and Dr. Warren Brown.
(Tnx to Morton Plant Hospital, Clearwater, Florida, an associate of the University. of South Florida medical school.)

WRITE TO US!
We welcome your comments. Mail to Marco, P.O. Box 127, Indian Rocks, FL, 33785. Email to warren.brown1924@gmail.com Letters may be edited for brevity & clarity.

MARCO NET SCHEDULE

DAY	EASTERN	FREQ.	NET CONTROLS
Any Day	On the Hour	14.342	Hailing Frequency
Sunday	10:30 a.m. Eastern	14.140	CW Net, Chip, N5RTF
Sunday	11 a.m. Eastern	14.342	Warren, KD4GUA

(Alternate ***confidential*** Grand Rounds frequency— on or about 14.344 or as announced on the air.)

MARCO'S CW NET IS NOW CALLED THE *"Bob Morgan Memorial Net"*
Sundays, 10:30 am, 14.140 MHz

MARCO Grand Rounds is held Sunday at 11 a.m. Eastern Time; 10 a.m. Central; 9 a.m. Mountain, and 8 a.m. Pacific Coast time on 14.342. You qualify for one hour Category II CME credit with your check-in.

insulin and INDERAL; Plavix and Prandin; Tagamet and Dilantin; Calan SR and Lanoxin, just a few.

We've also seen cases where one doctor was prescribing a medication to treat symptoms that were being caused by another medication prescribed by another doctor.

Then along came S**idney M. Wolfe, M.D.** now 80, a graduate of Case Western Reserve, in 1966. He met consumer advocate Ralph Nader in Washington, D.C. at a meeting and began advising Nader on health problems in the U.S., and helped in the recruitment of medical student volunteers who worked for Nader. Wolfe co-founded the consumer lobbying organization Health Research Group with Nader in 1971 and has been its Director since.

He writes, There are significant differences in the ways younger and older adults react to medications although the pills doctors prescribe are tested on ***young healthy people***. Seniors carry a greater percentage of fat to water than younger people, which means that drugs that concentrate in fat tissue may stay in the body longer than they should. Seniors livers are not as efficient as certain drug's aren't excreted from the body as they would be in a younger person. Older kidneys have a decreased ability to clear drugs. Seniors generally take multiple drugs which increase the likelihood of harmful drug interactions.

So...if drug companies aren't going to test drugs on seniors who are going to use them…and if doctors are going to prescribe medications to 70 year olds, the same way they do to 30 year olds...then who is going to make sure you aren't getting the wrong drug, or too much of it?

For more than 30 years, Wolfe campaigned to have propoxyphene (Darvon) removed from the market because it can cause heart arrhythmias. In 2009 the FDS advisory panel recommended that it be withdrawn form the market. The recommendation to ban the drug was ultimately not upheld and instead manufacturers were required to place additional warning labels on packaging. In 2009, Wolfe was appointed to the FDA's Drug Safety and Risk Management Committee. On Nov. 19, 2010, the FDA recommended against continued prescribing and use of propoxyphene (Darvon).

In 1993, Wolfe published the book *Worst Pills, Best Pills.* Many of his readers thought he was a charlatan, feasting on "side-effects." However, he never backed down in the face of enormous industry and government pressure, and the result is that our country is now safer thanks to his attention to details.

Now working at *Public Citizen Health Research Group* which he founded with Ralph Nader in 1971. He is continuing with the organization as "*founder and senior adviser.*" He is credited with banning 25 drugs and getting warning labels about Reye's syndrome on aspirin bottles and modifying breast implants.

Recently he published a list of drugs you should never take: Actos, Arcapta, Aricept, Avandia, Celebrex, Crestor, Echinacea, glucosamine & chondroitin, Lunesta, Miacalcin Nasal Spray, Mobic, Qsymia, Relenza, Singulair, Synephrine, Tricor, Tussionex, Ultram, Valium, Victoza, Cardura, Januvia, Nizoral, Pradaxa, Eliquis, Xarelto and testosterone products he lists as potentially dangerous.

Whether Dr. Wolfe's advice is an overplay on "side effects" or a valid warning remains to be seen. Once seen as an "opportunist" he has been found to have excellent credentials and reputation and has little to gain to be preaching half-truths.


NOW HEAR THIS

THE LATEST "*CUTTING EDGE*"

THE FASTING DIET

A mere 5 years ago, skipping, meals was a top diet taboo: Now it's the core of an increasingly popular (and increasingly research backed) weight-loss approach. Intermittent fasting—periodically eating very little is not only not bad for you, it may lower blood glucose levels and insulin resistance and reduce inflammation and CV risk. Why? How? Theories abound, but some experts believe fasting puts your cells under mild stress, just as exercise taxes your muscles and heart, ultimately strengthening them and making them more resistant to disease.

Studies suggest you keep more muscle and lose more fat than on other diets, even if you lose the same number of pounds. That's because after about 12 hours of fasting you run out of stored energy from carbohydrates and start burning stored fat.

Whether a regimen calls for two fasting days a week or eating your meals in a smaller window of time in the day, all plans share a near-freedom from calorie counting, a big plus.

Try a 16 hour fast, a popular method called 16:8. Another popular regimen is the 20:4 eating within a four-hour window of a 24 hour day. Users state the health benefits make them feel great, with more energy, inner calm and mental clarity.

Research shows it's an effective weight loss strategy and also has potential to improve health for people of normal weight. Regular practice may delay the onset of age-related diseases such as cancer, Type 2 diabetes and neurodegenerative diseases such as Alzheimer's. It also appears to enhance learning and memory and can increase life span.

It appears that restricting calories activates genes that direct cells to preserve resources. Rather than grow and divide, cells in famine mode are, in effect, stalled. In this state, they are mostly resistant to disease and stress and enter into autophagy, a process of cleaning out dead or toxic cell matter and repairing and recycling damaged components.

As fasting has grown in popularity, scientists and nutritionists have developed different methods of practice. Some practice time-restricted feeding like the 20:4 regimen (no food for 20 hours and then eat during the remaining 4 hours). Some push the the 23:1 cramming all their eating into one hour a day. Other approaches pace out fasting days throughout the week, such as the the 5:2 method—two days of not eating over seven days. With all this you can forget calorie counting.

One of the concerns with fasting is that people will binge on non-fast days. But the two months-long trial published in 2018 showed that dieters, specialty those following 5:2, didn't binge.

What about ketones? In humans fasting for 12 hours or more drops the levels of glycogen, a form of the cellular fuel glucose, like changing to a backup gas tank the body switches from glucose to fatty acids, a more efficient fuel. The switch generates the production of ketones which are energy molecules that are made it the liver and the glucose level drops. Why not try it—you have nothing to lose except pounds.

(Editor's note: I, unknowingly to the above, have been on a 20-4 fasting diet for 20 years and my weight has remained in the 141-145 lb range the entire time.)

WHAT IS "CHOOSING WISELY?"

Choosing Wisely is a U.S. based health educational campaign, led by the American Board of Internal Medicine (ABIM). It seeks to improve doctor-patient relationships and promote patient-centered care by informing patients and physicians about overutilization of medical resources.

The U.S. now spends more than 20 times what comparable countries spend per person on healthcare. A 2005 study by the National Academy of Sciences argued that 30% of the health care spending in the U.S. was wasteful and subsequent research has supported this finding. Some reports indicate that countries comparable to the U.S. are able to provide better health care to more people while consuming fewer medical resources. Reducing the cost would make it accessible to more people.

The campaign attempts to reduce medical burdens by compiling a very large list of treatments which have been questioned. The campaign encourages doctors and patients to discuss, research, and possibly get second opinions, before proceeding with these treatments. To conduct the campaign, a coordinator from ABIM Foundation asks medical specialty professional organizations to make 5 recommendations for preventing overuse of a treatment in their field. Distributors then share this information with community groups nationwide, and the medical specialty societies disseminate it to their members. The intent is that patients and doctors will research and discuss the recommendations in these lists, believing that if patients and doctors communicate with each other more effectively when making health decisions, patients will have better outcomes and the medical system itself will benefit.

The campaign follows a history of proposals for both increasing doctor-patient communication and reducing waste in health care. Most commentators confirm the existence of avoidable waste in the health system. Proponents of the campaign say that it is a uniquely broad and much-needed effort.

To participate in *Choosing Wisely,* each society developed a list of five tests, treatments, or service which that specialty commonly overuses. The society then shares this information with their members, as well as organizations who can publicize to local community groups, and in each community patients and doctors can consider the information as they like.

The campaign has been criticized by some claiming the campaign does not follow standards of practice or research, is biased against diagnostic testing, and is an effort by supporters of single-payer healthcare to reduce costs so that single-payer healthcare becomes affordable.

As of April 2018, there were 552 recommendations targeting a range of procedures to either question or avoid without special consideration.

Examples: Acknowledge that doctors are increasing their use of diagnostic procedures without proportional increase in patient outcomes. Consider the effects of overuse of diagnostic services.

Physicians overuse radiography services. In many cases this fails to improve patient outcomes. This also subjects patients to unnecessary ionizing radiation and the possibility of further unnecessary testing.

Impact... The *Choosing Wisely* campaign makes no provision to scientifically resort its own efficacy, but academic centers are making plans to independently report on the impact of the campaign. The campaign has been cited as being part of a broader movement including many comparable campaigns. The German Network for Evidence Based Medicine considered adapting concepts from the program into the German healthcare system. In April 2014, *Choosing Wisely Canada* launched. The services targeted by the *Choosing Wisely* lists have broad variance in how much impact they can have on patients'care and costs. Some have called it "rationed care." What is your opinion? Is it litigation that drives American doctors to order more and more tests? Are socialized medicine countries able to sue their governments about abuse in not ordering more and more procedures? What a mess, you're damned if you do and damned if you don't! No wonder 40% of American doctors are suffering from "***burnout!"*** *or "burned up."* Perhaps a high school drop-out working for an American insurance company has told the doctor what he can do and not do and that also is part of the problem.

Note: At one time Alaskan physicians refused to care for Alaskan lawyers because of the suing problem. They told the attorneys they would have to seek their health care in the lower 49 states! What happened? The suing problem gradually became realistic. Perhaps the lower 49 could refer their lawyers to Guam.

****

"Aether" printing has been performed by
Colorfast Printing (5 Stars), 14114 63rd Way N., Clearwater, FL. 33760
Phone 727 531 9506; Fax 727 531 1684

WHO WAS THE 1ST PRESIDENT OF THE U.S.?

In reality, George Washington was our Ninth President!

Before we can determine who the first president of the United States was, we must decide—When did the United States become the United States? It wasn't the United States prior to 1776 when the 13 colonies issued the Declaration of Independence. However, about that time the colonies began to refer to themselves as states and those who signed the Declaration of Independence described themselves as "Representatives of the united States of America." Although "the united States" they referred to might be interpreted as simply a description and not a formal designation.

As soon as the States became independent, they began devising a formalized structure to operate under. But they were determined not to create a powerful central authority that could become as oppressive as the British Monarchy they had opposed. They recognized the need for a Congress, a central governing body, but were adamant that Congress and the States should be "coequal"—a dual sovereignty." To accomplish this goal, they drafted the "Articles of Confederation." The document they crafted refers to a "Confederacy," a volutary league of states. Article I names the Confederacy, "The United States of America."

The Articles of Confederation were ratified on March 1, 1781. The document created the office of president to be appointed by a Committee of the States and limited to a term of one year. Presidential duties involved presiding over the United States in Congress Assembled, executing laws, treaties and military orders, including military commissions, receiving foreign dignitaries assembling and adjourning Congress, and other duties required by the office. A new president, **John Hanson** of Maryland, was selected on Nov. 5th, 1781. President Hanson served a one-year term that ended on Nov. 4, 1782. From 1782 until 1789,when George Washington took the oath of office, seven more presidents were chosen. **And, therefore, George Washington was actually our ninth president.**

These first eight presidents were among the best and the brightest of the early founders. The first, John Hanson, made the most of his twelve months in office. He established the Great Seal of the U.S., created the first Treasury Department, Foreign Affairs Department and the Secretary of War. President Hanson removed all foreign troops from America and designated the 4th Thursday of every November a Thanksgiving Day holiday.

The fourth president was Richard Henry Lee of Virginia, General Robert E. Lee's grandfather. He was one of the most famous orators in Congress and he was the one who introduced the resolution calling for a formal declaration of independence from England. His resolution was adopted and Lee was selected to head the committee to draft the document. However an illness in his family made it necessary for him to return home indefinitely so the task was given to his friend Thomas Jefferson.

Arthur St. Clair, president #7, issued the Northwest Ordinance that annexed the Northwest Territory. He also created a Confederation Convention for the purpose of correcting deficiencies in the Articles of Confederation. The revised Articles became the U.S. Constitution. The new Constitution changed not only the presidential election process but also expanded the scope of the presidency beyond the duties prescribed for the original eight.

Reasonable people could disagree on whether or not the Declaration of Independence was the beginning of the United States. On the other hand, there is nothing ambiguous about the language of the Articles of Confederation. With the ratification of this document the **united** States officially became the "**United** States."

The proceedings held to revise the Articles of Confederation produced a lengthy and often emotional debate between those who wanted a strong central government and those who wanted to continue the loose association of states. George Washington presided over these often passionate deliberations and it took a major effort on his part to maintain order among the delegates.

More than a year after its ratification and Washington's inauguration, the thirteenth state finally approved the Constitution. Because he was the first president to take an oath to support this new Constitution, General George Washington, by consensus if not by fact, is considered to be the first president of the Untied

NEWSENSE...Tantalizing News!

Originated by Columnist Walter Winchell

EDITOR'S NOTE: Walter Winchell began broadcasting in 1933 to an audience of 25 million people. The Winchell style was unmistakable. He talked rapidly at 197 words per minute..the voice was high-pitched and not pleasant to the ear; but it was distinctive. The staccato quality made every item compelling. He claimed he talked so fast because if he talked more slowly people would find out what he was saying...he began his radio program with a series of dots and dashes operating the key himself. Telegraphers throughout the country complained that what Winchell tapped out made no sense. He realized he hadn't the faintest knowledge of Morse code but he refused to have an experienced telegrapher provide the sound effects for him. He wrote like a man honking in a traffic jam.

(Some of Walter's "blessed events" were "fake news;" Some of his protégés have inherited his weakness to produce the same—beware!)

****

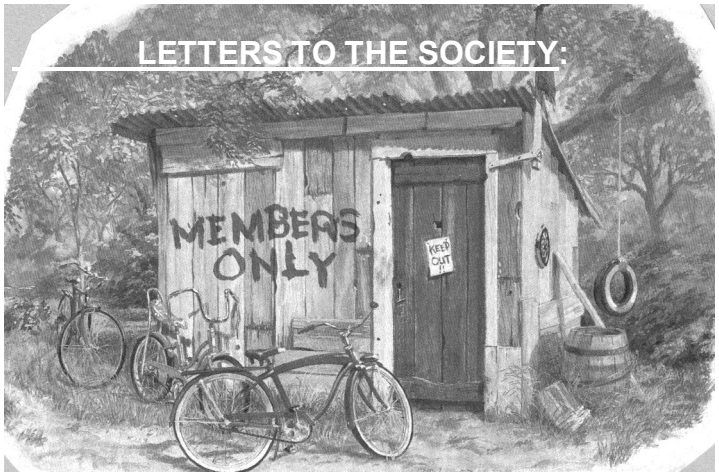
Aspirin after age 70? A 19,000 people study in Australia of those over 70 taking 81 mg of ASA daily found no prevention of heart attacks or strokes. The researchers had expected that aspirin would help prevent these and the doctor in charge stated it was "*an ugly fact which now has slayed a beautiful theory." (How about 325 mg?)*

Learn, bike, then sleep...A new study suggests that when learning a new task, people improve their long-term retention of those skills by about 25% when they exercised intensely for as little as 15 minutes immediately afterward—provided this is followed by a good night's sleep.

Americans who live in compact metropolitan counties live longer, by 2.7 years, on average than those who reside in more rural ones. Three reasons for the effect: more car crashes but at lower speeds; Less obesity in metropolitan areas since more people walk than ride and better air—because denser places are more reliant on public transit systems with less pollution than with cars.

Results of ancestry tests may differ from company to company...Companies rely on proprietary databases and algorithms to make their assessments. Results may vary depending on how many people a company has in its database, as well as how diverse their backgrounds are. Some groups, including people of African and SE Asian descent are often underrepresented in data bases. Political and geographic borders of countries have shifted over history and tribes and people migrated to different places. Best to get estimates from two different companies.

Pentagon 2017 data indicates almost 3/4 of the 17-to-24 age group (24 million of 34 million) is ineligible for recruitment into the military because of major deficiencies, poor education, criminal records, histories of substance abuse, substandard physical fitness, or poor health (specifically obesity). Some or all of these could easily be categorized as "extensive disabilities," thus qualifying as exemptions and rendering a national service draft essentially useless. The military is struggling to meet an 80,000 person recruiting goal. Who will defend us? The "Minute Men" of yonder with their shotguns?



LETTERS TO THE SOCIETY:

Kudos from: No luck this issue!

Louis J. Lyell WA5YMK, Jackson, MI. sent a copy of the *Hinds County Gazette* with headlines which read "MS State Health Officer to retire this Fall" after 34 years in government service. Below the headlines, is a photo of Dr. Mary Currier who will retire Nov. 1st the post of Mississippi State Health Officer. Mary is the daughter of the late Dr. Bob Currier WB5D one of the pioneers of MARCO. The resemblance to her Dad is amazing.


Dr. Mary Currier

We have just received notice from Lou WA5YMK, of the passing of Bob Currier's wife Marilyn, 88, on Oct. 16, 2018 in Ridgeland, Mississippi. She was a graduate of Michigan University where she met Bob. Marilyn was a wonderful lady.

Dr. Bob Conder, Raleigh, NC wants to know if his Grand Round check-ins via the computer are being recorded by Bruce KM2L and forwarded for CME credits. The answer is "*not yet.*" With propagation on the down swing many stations are not picked up via radio thus leaving a void from those joining the Grand Rounds net via computer. Since only stations with 5 Sunday check-ins are published in *Aether* some members are being bypassed.

Ted Figlock W1HGY, Taunton, MA writes: Sadly, I report the passing of Joe Nates K1MRC, at age 96. He was a urologist and leaves an assortment of rigid cystoscopes etc.—anyone interested in acquiring such stuff? None of his family has interest in ham radio, and I will be putting some of his old rigs back on the air. (*If you are interested in any of Joe's rigs contact Ted at 236 Winthrop St., Taunton, MA 02780.)*

Bob Conder, Raleigh, N.C. wants to know how to check-in to Grand Rounds on the computer and still get CME credit? Answer, send an email to Warren at *warren.brown1924@gmail.com* that you are "on board."

Roger Higley W8CRK, Cincinnati, Ohio writes via Arnold Kalan WB6OJB...Several years go, I asked our MediShare committee to consider help fund the Shoulder to Shoulder program in Honduras which you did. I am asking that you consider the request again. Maybe for a little more money this time. I have asked Drs. Larry & Jan to send you the newsletter about the activities there, the money is used wisely!! Since our MARCO President this year is a dentist it could be sent in his honor..

Richard Lochner, M.D., Knox, IN: A note to say we're still here. This church thing is still going. I am preaching, getting pulpit supply and being worship leader. Marcia (XYL) is doing a lot of secretarial duties as well as playing piano and organizing the service. Hope all is well. Will be back soon, I hope, I need my tower climber to climb and plug things in. Unfortunately he is not well and the weather is cold and windy at 80'.

MARCO AD IN QST MAGAZINE

Club/Hamfests/Nets

FRIEND OF BILL W?? 12:30 pm Eastern: HAAM Net Sat 14.290, Sun 14.340 and Mon-Fri 14.316 http://www.qsl.net/haam/

MARCO Medical Amateur Radio Council. Professionals enjoying ham radio. Free newsletter & info. WB2MXJ@arrl.net

MEDICATIONS AND YOU

Guest Lecture by Bruce Small, KM2L, Grand Rounds, Sept. 9, 2018

How do health providers think about medications? Every medical treatment, whether it is a drug therapy or procedure, has an intended benefit. We do these things hoping to alleviate symptoms; reverse or slow down disease, or to prevent complications. Unfortunately, every medical treatment also carries risk. It is the job of the medical provider to assess the relative benefits and risks of each treatment, and to recommend which course of action is the best to help in the decision making process, medical practitioners use a combination of the following:

Data obtained from published studies, that document the results achieved by a given treatment.

Expert opinion. Recognized experts publish books and papers and give lectures about their area of specialization. This is also why you may be referred to a specialist.

Personal experience. While this may seem to be fuzzy and anecdotal, there is ample evidence that a doctor's results improve as he or she gains experience in treating a specific condition.

As we age, we undergo many physiologic changes—heart, lung, kidney and liver function deteriorate. We don't see, hear or think as well as before and we lose strength and balance. The amount and distribution of fat in our bodies changes, and this can affect the metabolism of certain drugs. The end result of all this is that the balance of benefits and risks of medical treatments becomes less favorable. Older people are at higher risk.

Unfortunately, when medications are new on the market, there is very little information available regarding their effects in the elderly (since they are tested on young people). In order to get a new medication approved for marketing, the manufacturer must conduct clinical studies to demonstrate that (1) the drug is effective for the intended condition, and (2) it is relatively safe. The final determination (in the U.S.) is made by a panel of experts convened by the FDA, These clinical trials are expensive and time-consuming to conduct, and the drug company has a great deal riding on being able to demonstrate a favorable outcome. As a result, most of these clinical trials exclude older patients or people with multiple medical conditions. Only after a drug has been sold for several years do we begin to collect information on its effects in older and more complicated patients.

Polypharmacy...is not the girl working at the local Walgreen's, it is the use of too many medications. Unfortunately, there is no single definition. It can be defined as taking greater than a set number of different medications, but that number varies between five and nine in the literature. Other authorities define polypharmacy as taking "medically unnecessary" drugs. The problem with this definition is not everyone agrees on what is necessary.

However it is defined, polypharmacy is quite common. In the ambulatory setting, about 35% of patients take five or more medications. Around half of patients are taking five or more medications at the time they are admitted to a hospital. In nursing homes in the U.S., 40% of residents take NINE or more medications! Why do many of us take so many pills??? Here are some of the reasons:

We see multiple medical providers, and each focuses only on his own specialty. Communication among our provides is not as good as we would hope.

The reasons for a particular drug are not always clear to our doctor, especially if it has been prescribed by another provider.

Academic bodies issue practice guidelines, specifying how to treat a given condition. These guidelines are prepared with only that single disease in mind, and do not help your doctor calculate risks and benefits if you have multiple other conditions or take several other medications. Over time, these guidelines tend to become standards of care, and your provider feels pressure to adhere to them.

Many patients expect to receive a prescription, and are disappointed if they leave the office empty-handed.

Some patients or their families resist the suggestion to reduce the number of prescribed medications.

Polypharmacy results in a number of unwanted effects. It increases

the cost of care, as we must pay for the medications, pay of their monitoring, and pay for treating any adverse events caused by the drugs.

Adverse drug events ae very common, accounting for over 4 million health care visits each year. The risk of experiencing an adverse drug event increases directly with each medication added to the regimen. These adverse events may take the form of drug-drug or drug-disease interactions, cognitive impairment, increased risk of falling, or poor nutrition. As we add more medications, it becomes more difficult to follow the prescribed regimen, both for reasons of cost and complexity.

What tools ae available to your doctor, to help him/her do a better job?

The Beers Criteria: This list was the work of the late Dr. Mark Beers in the late 1980s in Boston where he studied a large group of nursing home residents, and was able to demonstrate that much of their sedation delirium, tremor and agitation was due to side effects from the medications used to treat them. Dr. Beers recruited an expert panel to develop a list of medications that should be used with caution or not at all in the elderly. It was first published in 1991, and reissued in 2003. After Dr. Beers' death in 2009, the American Geriatric Society took over the job of maintaining the list and has published updates in 2012, 2015 and 2018.

The Beers criteria is essentially a list of potentially inappropriate medications (PIMS), organized into several tables—PIMS listed by drug category, PIMS listed by organ system, PIMS to be used with caution in older adults, PIMS to be avoided in patients with kidney disease and drugs with strong anticholinergic effects. The Beers criteria are readily available on –line, but are difficult to read and understand for non-medical professionals.

The Drug Burden Index: This is an interesting idea that has been poorly realized. Each medication can be assigned a score, based on its anticholinergic and sedative properties. For each individual it is then possible to generate a risk score based on the list of medications they take. The problem is that the calculation is not straightforward, and there are multiple different risk indices which don't all agree. To see how this works, go to HYPERLINK "http://www.anticholinergicscales.es/ calculate You will find a drop down menu listing medications by generic name,. Select yours and click the arrow to populate the list on the right hand side of the page. Click the "Calculate" button, and you will go to a complicated page displaying your risk score as determined by nine different schemes. Often these don't all agree.

Good Palliative-Geriatric PracticeAlgorithm. This is a decision tree guiding the use of medications in older people, and makes excellent sense. It is available under the "Figures/Tables" tab at HYPERLINK "https://jamanetwork.com/journals/ jamainternalmedicine/fullarticle/226051"

Describing.org is a Canadian Website dedicating to reducing medication usage. Some of it is intended for practitioners, but under the "Resources" tab, one can find downloadable education pamphlets dealing with PPI antacids and sleeping pills, among others.

As a medical consumer, what can I do?

Educate yourself but be mindful of your sources . Avoid clickbait sites on the Web. These are designed to get you upset and possibly to separate you from your money. You can recognize them by their lack of actual research, reliance on the opinion of self-proclaimed experts, and shocking natures of the claims and statement they contain.

Self-promoters generally serve up valid comment, but offer a line of commercial products. I consider Sidney Wolfe in this category. He has done good work, but seems eager to sell you his book. The People's Pharmacy " is an example. The drug -related information they provide is accurate, but they will try to convince you that your doctor is an idiot and that these publications will keep you safe.

Drug company Websites greet you with slick advertising, but if you dig deep enough, you can locate drug prescribing information and warnings/precautions for the medication in question.

Government, university and medical school Websites can be quite helpful. The FDA (HYPELINK "http//www.fda.gov/"www.fda.gov) has an excellent section called "Medicine and You: A Guide for Older Adults." The NIH and CDC contain disease-specific information and CDC does a good job of explaining the reactions and side effects of antimicrobials. Mayo Clinic has an excellent section on medications, including information about supplements. Visit HYPERLINK "http:// www.mayoclinic.org/drugs-supplements"

National organizations such a the AMA, American Diabetes Association, National Kidney Foundation or the Alzheimer's Association are excellent sources for disease specific information.

Make sure that each doctor knows your accurate medication list. You can prepare a list to carry in your wallet or purse. Several places, including FDA and the American Society of Health System Pharmacists offer downloadable forms that are ready to be filled out. There are also smart phone apps designed to do the same thing. Carry this information with you!

Express yourself. What are your preferences with regard to medications? Are you having symptoms or complaints that may be due to your mediations? Make sure that your doctor is aware of these things.

Ask Questions! Here are eight things you should know about each of the medications you take:

1. What is the purpose of this medication.?
2. What are the risk and benefits of this medication for me?
3. What side-effects I should I look for?
4. What precautions should I take?
5. How do I know if this drug is working?
6. Would a lower dose work as well?
7. Can the medication be stopped after a certain time?
8. Are there nondrug alternatives?

****

LEWY BODY DEMENTIA

As presented on Marco Grand Rounds, Oct. 7, 2018

What is Lewy Body Dementia? LBD is a disease associated with abnormal deposits of a protein called alpha-synuclein in the brain. These deposits, called **Lewy bodies**, affect chemicals in the brain whose changes, in turn, can lead to problems with thinking, movement, behavior, and mood. LBD is one of the most common causes of dementia.

Diagnosing LBD can be challenging since it is often confused with Alzheimer's or schizophrenia. Also, LBD can occur alone or along with other brain disorders.

There are two diagnoses of LBD—*dementia with Lewy bodies* and *Parkinson's disease dementia.* The earliest signs differ but reflect the same biological changes in the brain. Over time, people with dementia with Lewy bodies or Parkinson's disease dementia may develop similar symptoms.

LBD affects more than one million in the U.S. It typically begins at age 50 +, although sometimes younger people have it. It effects slightly more men than women.

LBD is a progressive disease, it lasts an average of 5 to 8 years from the time of diagnosis to death, but the time span can range from 2 to 20 years.

In the early stages of LBD, symptoms can be mild, and people can function fairly normally. As the disease advances, people with LBD require more help due to a decline in thinking and movement abilities.

Currently, there is no cure for the disease.

Lewy bodies were named for Dr. Friederich Lewy, a German neurologist in 1912 He discovered abnormal protein deposits that disrupt the brain's normal functioning in people with Parkinson's disease. The abnormal deposits are now called "Lewy Bodies."

Lewy Bodies are made of a protein called alpha-synuclein. In the healthy brain, alpha-synuclein plays a number of important roles in neurons especially at synapses, where brain cells communicate with each other. In LBD, alpha-synuclein forms into clumps inside neurons starting in areas of the brain that control aspects of memory and movement. This causes neurons to work less effectively and, eventually, to die. The activities of certain brain chemicals are also affected. The result is widespread damage to specific brain regions and a decline in abilities affected by those brain regions.

Diagnosing... Which type of Lewy Dementia? LBD is an umbrellas for 1. Parkinson's disease dementia and 2. dementia with Lewy Bodies. If cognitive symptoms occur at the same time or at least appear before movement problems the diagnosis is dementia with Lewy bodies. The patient may lose bladder control, have either or both auditory & visionary hallucinations on going to sleep or awakening, memory loss, body rigidity, hunched posture, delusions, social withdrawal, movement disorders, sleep and behavior disorders and abnormal blood pressure and bowel control. *(Both Ted Turner & Robin Williams were victims.)* Life span after diagnoses is around 5-8 years with death usually from pneumonia. You cannot diagnosis this disease with MRI.

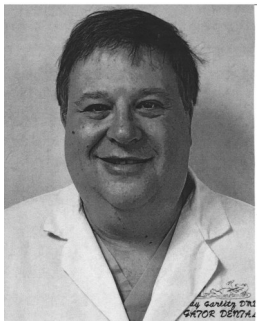
No good treatment but...cholinesterase inhibitors such as Exelon helps. Deep brain stimulation does not work. Klonopin helps the patient sleep and relieves restless legs. Melotonin can be tried. The patient should avoid alcohol, caffeine, chocolate, Zyprexia, Risperdal Seroquel, Clozapine, but Nuplazid for hallucinations & delusions may help. Do not give Haldol or Benadryl.

There is a depletion of acetylcholine producing cells and this type drug may help along with a trial of dopamine.

Dementia with Lewy Bodies is usually a worse disease than Alzheimers.

GREETINGS FROM OUR MARCO PRESIDENT

Jay Garlitz, AA4F



Season's Greetings from our Marco President—December 2018.

At the time of my writing for this column, Thanksgiving is approaching. Randi and I hope yours included reflection of all you are thankful for. Family get-togethers, bountiful meals, football, and free time for getting on the air are a great combination. Thank you to all the Marco volunteers that make our organization successful. Voluminous hours are spent producing the newsletters, researching, running, participating ad streaming the Grand Rounds of the air; maintaining the Website, doing the bookkeeping, keeping the membership database accurate; and much more. Please take time in reading this issue to note who are the volunteers of Marco as detailed in print. Take time to thank them for all they do.

December is a month full of celebration. May your Christmas and/or Chanukah be joyous, all that you wish for. Perhaps Santa will reward you with a ham radio item. Rotate that yagi northward and voice your desire on the air, you never know. I whispered a wish earlier this year to a friend and Christmas recently came early at the club station at U of F, W4DFU. The department of Electrical and Computer Engineering surprised us with a Flex-6600 radio, which is essentially an internet connected radio server. I have been setting it up the past few weeks and we can now operate remotely using an IPad or laptop anywhere on campus, off-campus, and beyond. Having a network of friends to whisper to can be invaluable.

We have opportunities to network Marco with others in February and May. HamCation in Orlando and HamVention in Dayton/Xenia are not the sites of our annual meeting this year, but are both important to making new friends and socializing with our members. Please join us for one or both, as we will have a booth and Marco presence at these popular and heavily attended hamfests.

In April we are having our annual meeting in Tampa, the weekend of April 26th. Tampa is a destination that is easy to fly to and we have chosen the Airport Marriott as the site for our meeting. Just fly in and roll your luggage into the hotel as it is attached to the terminal. There is no need to rent a car, just relax and enjoy yourself. We will head out for group activities geared for members and spouses. Details are on our Website, and the most current information can be found online at *http://www.gatorradio.org/MARCO.html.*

The optional Marco cruise that follows our annual meeting in Tampa has 13 cabins reserved so far. Our room block is currently valid until the end of November, but it still may be possible to get reservations if you want to join us. We plan on operating HF in three ports, with three special event call signs being applied for. Dx locations are Belize, Honduras, and the Cayman Islands. If you cannot join us work us on the air! As the time approaches help us network to get the word out so we can generate publicity. Professionals in the Healing Arts deploying for 6-8 hours and being Dx on the air sounds quaint, but the photos and publicity will be impressive. Working special event stations are a popular activity in our hobby. We will make sure to produce a QSL card and QRZ pages that bring Marco much needed exposure in the Ham radio community. This networking will be much more than a whisper and expose hams and their friends in our professions to the camaraderie and value that Marco involvement exudes.

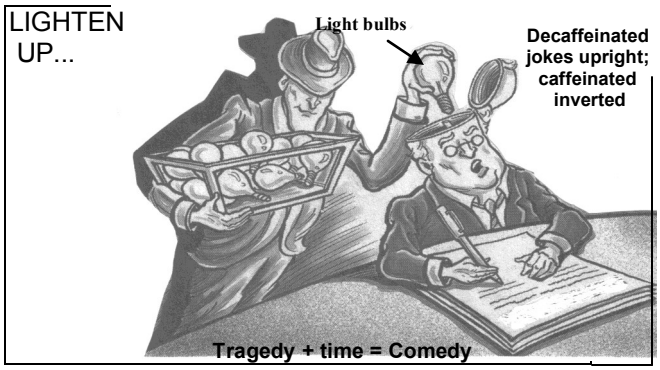
Randi, I, and the leadership of Marco wish you a Happy and Healthy 2019.

In friendship and dedication to Marco,

Jay, AA4FL

****

LIGHTEN UP...



HOSPITL CHART BLOOPERS... The patient refused autopsy and there is no prior history of suicides. *She has no rigors or shaking chills, but her husband says she was very hot in bed last night.* While in the E.R. she was examined, x-rated and sent home. *Rectal exam revealed a normal-sized thyroid.* I saw your patient today, who is still under our car for physical therapy. *Examination of genitalia reveals that he is circus-sized.* Lab test indicated abnormal lover function.
The pelvic exam will be done later on the floor.
****

A BURGLER BROKE INTO A HOUSE ONE NIGHT...He shined his flashlight around, looking for valuables when a voicing the dark said, "Jesus knows you're here." He nearly jumped out of his skin, clicked his flashlight off and froze. When it was quiet again he shook his head and continued...just as he pulled the stereo out so he could disconnect the wires, clear as a bell he heard "Jesus is watching you." He shined his light looking for the source of the voice. Finally, in the corner of the room, his beam came to rest on a parrot. "Did you say that" he hissed at the parrot. "Yep," the parrot confessed, then squawked, "I'm just trying to warn you that he is watching you." The burglar relaxed. "Warn me, huh? Who in the world are you?" "Moses," replied the bird. "Moses?" the burglar laughed. What kind of people world name a bird Moses?" "The kind of people that would name a Rottweiler Jesus."

**********-

"Lexophile" describes those that have a love for words, such as "You can tune a piano, but you can't tuna fish, or "To write with a broken pencil is pointless." This year's winning submissions are posted below: *I'm reading a book about anti-gravity. I just can't put it down!* I didn't like my beard at first, then it grew on me. *Did you hear about the crossed-eyed teacher who lost her job because she couldn't control her pupils?* With her marriage, she got a new name and a dress. *Did you hear about the fellow whose entire left side was cut off? He's all right now.* The guy who fell onto an upholstery machine last week is now fully recovered. *When she saw her first strands of gray hair she thought she'd dye.* When you get a bladder infection, urine trouble. *I know a guy who's addicted to drinking brake fluid, but he says he can stop any time.* When the smog lifts in Los Angeles, U.C.L.A. **(Tip of the hat to Bruce Small KM2L.)**
****

Computer salesman: "This computer will answer any question correctly." **Customer:** "Can I ask it a question?" **Computer salesman: "**Go right ahead." **Customer: "**Where is my father?" **Computer: "**Your father is fishing in Alaska." **Customer to salesman: "**That is wrong my father is dead." **Salesman to customer: "**Ask the computer again and phase it differently." ***Customer to computer:*** "Where is my mother's husband?" ***Computer:*** "Your mothers husband is dead but your father is still fishing in Alaska."
****
**

The new perfume called "***Nothing"*** is now available. Women wearing ***Nothing*** are in great demand.

A 5-year old boy and girl are walking along a fence when the boy sees a knot-hole and peeks through. "Wow," he yelled, "there are naked people in there!" "Are they men or ladies," asks the girl." "I can't tell," cries the boy, "they don't have any clothes on!"

==========

NEVER ARGUE WITH A MAN WITH A FLAT NOSE!

Tony & Guido were sitting at the bus stop. A bus stops and two Italian men get on and sit down and engage in an animated conversation. The lady sitting next to them ignores them at first but her attention is galvanized when she hears one of them say the following: "Emma comea first. Den I come, Den two eesss comes together. I come once a more! Two esses, they come together again. I comes a gain an pee twice...then I comea one lasta time. The lady can't take this anymore, "*You foul-mouthed sex obsessed pig*" she retorted indignantly. "*In this country we don't speak aloud in public places about our sex lives*. "Hey coola down lady," said the man "Who is talking abouta sex? **I'm a justa tellin' my friend ahow to spell "Mississippi."**

MARCO OFFICERS

President: Jay Garlitz, D.M.D., AA4FL.
P.O. Box 10, Hawthorne, FL., 32640
Phone 352 481 2677; email: jgarlitz@ufl.edu

President-Elect: Bruce Small, M.D.., KM2L
10540 Stoneway St., Clarence, N.Y., 14031
Phone: 716 713 5597, BruceSmall73@gmail.com

Secretary: Joseph Breault, M.D., WB2MXJ
1615 Brockenbraugh St., Metaire, LA., 70005
Phone: 504 259 1191; email: wb2mxj@arrl.net

Treasurer: Charles Lind, M.D., N8CL
1353 Rowe Road, Niskayuna, N.Y. 12309

Web Master: Dave Lieberman, KT8E
4424 Technology Dr.
Fremont, CA 94538,
E-mail: Dlieberman@computer-methods.com

Radio-Internet Coordinator:
T. "Chip" Keister, M.D., N5RTF
1000 Jefferson Ave.,
New Orleans, LA. 70115, phone: 504 899 3486
E-mail: tkeister@bellsouth.net

MediShare Director:
Arnold Kalan, M.D., WB6OJB
16690 Charmel Lane,
Pacific Palisades, CA 90272,
E-mail: wb6ojb@yahoo.com
Phone: 310 459 2495

Newsletter Office:
Warren J. Brown, M.D., KD4GUA
P.O. Box 127, Phone 727 542 4158 (cell) 727 595 2773 (home)
Indian Rocks Beach, FL., 33785
E-mail: warren.brown1924@gmail.com
****

REGIONAL DIRECTORS:

Area 1: Vacancy
Area 2: Barry Rabin, M.D., WB1FFI, 315 727 0484
Area 3: Keith Adams, M.D., N3IM docadams12@gmail.com
Phone: 570 295 0629 cell. Past President Marco
Area 4: Mary Favaro, M.D., AE4BX, (4th) , Phone: 843 267 6879
Email: maryfav@aol.com Past President Marco
Area 5: Linda Krasowski, R.N., KE5BQK, Phone 915 857 5933
bkrasowski@elp.rr Past President Marco
Area 6: Paul Lukas N6DMV, dmvpalko@yahoo.com; 310 370 9914
Area 7: Albert Breland, M.D., KA7LOT, Phone: 858 793 6887
Area 8: Roger M. Higley, D.D.S., W8CRK(8) rhigley599@aolcom
Phones: 513 451 1096, 513 481 5885
Area 9: Bill T. Hargadon, WA9HIR (9th), Phone: 708 341 2338
Area 0: Frederic M. Simowitz, M.D., K0FS (0 Fredsimo@aolcom,
Phone:314 725 5112. Past President Marco

DIRECTORS AT LARGE: (All Past Presidents of Marco.)
Harry Przekop, PA-C WB9EDP, hprzekop@aol.com; 312 829 8201
Arnold Kalan, M.D., WB6OJB wb6ojb@yahoo.com
Jeff Wolf, M.D., K6JW, k6jw@arrl.net, 310 373 5970
Richard Lochner, M.D., K9QA, 574 772 4115,
drlochkner@gmail.com

****

MEMORIES OF YEARS AGO IN MARCO

Our History Book

33 years ago in Marco, Dec. 1985

The November-December 1985 MARCO NL contained a report of on-air activity by Marco members following the earthquake in Mexico City. **Dr. William Brown W4OUK** was in Mexico City at the time and handled 1500 messages! Also mentioned was **Ed Westcott W4UVS** who passed traffic for Mexico City from the Oak Ridge, TN area.

23 years ago in Marco, Dec. 1995

Congratulations were due to President-elect **Robin Staebler**, then NN3L, who announced his plans to leave St. Joseph's Hospital and enter pirate practice in Reading, PA. The letters section contained missives from N2JOH, N4SM, WA6CRN, W6JZu, and W8QP.

18 years ago in Marco, Dec. 2000

Andrew Soper ZS2VJZ, Grahamstown, South Africa is our newest Dx member. Andrew has a National Diploma in Electrical Engineering and has served as Radio Communications officer in the Merchant Navy and is presently an Electronics Tech at Rhodes University Pharmacy Faculty. He is using a Yaesu 757 radio. Andrew joins **Dr. Sonny Schmahmann** ZS5KB of Durban as Marco[representative in the Republic of South Africa.

15 years ago in Marco, Dec. 2003

The membership has chosen the new logo over the old. The vote was about three to one in favor of the **Robin Staebler's** drawing which appear on this months masthead.

Fred Simowiz K0FS sent in the obit of **Bob Currier WB5D** that appeared in the magazine *Neurology*. The full-page article states "Dr. Adie Sahs gave Bob his first ham radio which rekindled this interest from his Air Corps service days when he was a radio-operator in a B-17 flying out of Italy. Bob was co-net controller of Marco's Grand Rounds of the Air for over 15 years before his passing in March 2003. Marco's Board voted in march 2003 to name the present Grand Rounds the "Bob Currier Marco Grand Rounds of the Air" in Bob's memory.

10 years ago in Marco, Oct. 2008

Arnold Kalan WB6OJB "is currently on the air as 3DA0JK from Sqaziland….he is working Europeans on 7.067 KHz: and is LOUD here," **Bruce Small KM2L** reports. Such was the pile-up Arnold was having on his 18th trip to Africa.

****

INFLUENZA UPDATE

Excerpts from Grand Rounds of the Air, Sept. 23, 2018

The Nasal Spray (Tamiflu) is now recommended for nonpregnant adults age 2-49..

No intradermal injectable flu vaccine will be available.

Vaccines will contain A/Michigan, A/Singapore, B/Colorado viruses. Fluzone is high-dose flu vaccine for those over 65.

Flu vaccine should be given by the end of October for best results.

If you are allergic to eggs you can still get the vaccine providing you experience only hives. Others who experience angioedema, respiratory distress may get the vaccine in a hospital setting.

There is no preferential recommendation for one injectable flu vaccine over another.

Flu activity usually peaks between December and February but the timing is unpredictable. 12,000-52,000 die in the U.S yearly and about 9% of the U.S. population is hospitalized.

Flu vaccine should be given to all over the age of 6 months. Those 6 months to 8 years may require a second dose one month later. Than the first. Flu vaccination of the mother during pregnancy can protect the baby after birth for several months.

The government is planning on making 165 million doses of flu vaccine.

Older people and others with weakened immune systems may not generate the same amount of antibodies after vaccination, and their antibody levels may not grow as quickly when compared to young healthy people.

Flu Vaccine is 40-60% effective

Anti-viral meds include: Amantidine and Rimantidine, which are no longer very effective and Oseltamivir (Tamiflu) one dose given according to a child's weight bid x 5 days and adults one capsule bid (30,45,75 mg for prophylaxis) 75 mg bid P.O. x 10 days for active disease; Zanamivir (Relenza) 30 mg bid x 5 days; Peramivir (Rapluab) given I.V. once dally 600 mg for 5 days.

****

8 BOB CURRIER MARCO GRAND ROUNDS OF THE AIR. (Corrections to Marco), Nov. 8, 2018

14.342, Sundays, 11 am Eastern, One Hour Cat. II CME

CALL	HRS.	NAME	QTH
KD4GUA	36	Warren	Largo, FL
N5RTF	35	Chip	New Orleans, LA
N2JBA	35	Ed	Amenia, NY
WB6OJB	34	Arnold	Pac. Pal., Calif.
KNOS	34	Dave	Virginia
WB9EDP	33	Harry	Batavia, IL.
N4TSC	31	Jerry	Boca Raton, FL
KC9CS	31	Bill	Seminole, FL.
N5AN	31	Bud	Lafayette, LA
KM2L	29	Bruce	Clarence, NY
N6DMV	29	Paul	Torrance, CA
N4MKT	29	Larry	The Villages, FL
NU4DO	28	Norm	Largo, FL.
WB1FFI	28	Barry	Syracuse, NY
KE8GA	28	George	N. Carolina.
W1RDJ	28	Doug	Cape Cod, Mass.
K6JW	26	Jeff	Palos Verdes, CA
W6NJY	23	Art	Beverly Hills, CA
N2OJD	23	Mark	Sydney, Ohio
KK1Y	22	Art	Seminole, FL.
N9RIV	21	Bill	Danville, IL
KD5QHV	21	Bernie	El Paso, TX
N8CL	20	Chuxk	Albany, NY
KE5SZA	20	John	Marietta, OK
W8LJZ	19	Jim	Detroit, IL
K8QA	18	Rich	Knox, IN
KC9ARP	18	Michelin	Batavia, NY
WA1HGY	18	Ted	Massachusetts
WA1EXE	17	Mark	Cape Cod, Mass.
N0ARN	17	Carl	Denver, CO
N9GOC	17	Pat	Champagne, IL
WA3QWA	15	Mark	Chesapeake, VA
W3PAT	15	Marvin	Prosperity, SC
W2MXJ	15	Joe	Louisiana,
KG4CSQ	13	Ralph	Huntsville, AL
K0FS	11	Fred	St. Louis, MO
W9JPN	10	Wally	Champagn, IL
WB9GET	9	Keith	Springfield, PA
W0RPH	9	Tom	Denver, IL
N9HIR	9	Bill	Berwyn, IL
WB9GET	9	Keith	Springfield, PA
KB5BQK	9	Linda	El Paso, TX
W4RLC	5	Bob	Raleigh, NC
KD8EFM	4	Dell	Ohio

\

YEAR	TOTAL CHECK-INS	AVERAGE PER SUNDAY
1998	694	14.46
1999	766	15.95
2000	1,035	20.29
2001	1153	22.60
2002	1383	26.15
2003	1489	28.63
2004	1534	29.50
2005	1517	29.17
2006	1531 (one extra Sunday)	28.89
2007	1591 (one extra Sunday)	30.02
2008	1524 (Only 46 nets)	33.14
2009	1533 (46 nets)	33.32
2010	1591 (44 nets)	36.22
2011	1514 (44 nets)	34.41
2012	1602 (44 nets)	36.41
2013*	1400 (44 nets) (New Freq)	31.82 (Year of Terrorist)
2014	1756 (47 nets)	37.36
2015	1722 (49 nets)	35.14
2016	1259 (36 nets)	34.97

Record number of stations checked-in was 51, on Feb. 24, 2013

ULTRASOUND VS. THE STETHOSCOPE

(As presented of MARCO Grand Rounds, Sept. 2, 2018.)

This can keep you out of a heap of trouble.

Point-of-Care ultrasonography (POCUS) refers to limited ultrasound performed at the patient's bedside to assess for many conditions such as aortic aneurysm and pleural effusion. In other words, doctor, *reach for your handheld ultrasound and not your stethoscope.*

The protocols usually answer a specific question that helps guide treatment and can be performed after a relatively brief training period. This is in distinction to consultative comprehensive, or formal ultrasound examinations that are performed by sonographers and interpreted by radiologists with years of training in reading ultrasound results. POCUS, on the other hand, is a tool of the family doctor. Its use was first introduced by E.R. physicians, but with technology advances allowing for smaller, pocket-sized ultrasound machines at lower costs. POCUS is becoming more accessible to family doctors. A feasibility study of the use of POCUS by residents who were given a handheld ultrasound machine and ***16 total hours of training*** revealed users found it was easy to learn to use and improved diagnostic efficiency and accuracy, and patients were highly satisfied.

There is mounting evidence that POCUS can help decrease the costs of care while improving patient access to care and safety. POCUS may reduce direct health care costs by serving as an initial triage tool to determine which patients may need more advanced imaging, thus decreasing the use of more expensive studies. A study comparing ultrasonography and CT scans for evaluation of suspected nephrolithiasis in the E.R. found that initial testing with POCUS decreased the number of CT scans by 59% without any change in outcomes. A 2008 study of Medicare data for musculoskeletal magnetic resonance imaging indicated that 45% of primary diagnoses could have been made with ultrasonography. Besides, ultrasound has no radiation and no known direct adverse effects. Also, when used as an adjunct to help guide common procedures, such as venous access, thoracentesis and arthrocentesis, ultrasonography's been shown to decrease rates of complications.

When using POCUS, generalists should be as accurate as cardiologists in assessing left ventricular systolic function, and even medical students are able to increase their diagnostic accuracy from 50% to 75%.

POCUS is superior to physical exam with stethoscope or chest radiography for making many lung diagnoses, including pleural effusion, pulmonary edema, pneumonia and pneumothorax.

Another benefit of POCUS in primary care is its ability to expedite and increase access to imaging . For example, abdominal aortic aneurysm screening using POCUS has a sensitivity of 99% to 100%, compared with screening in the radiology setting, and takes less than four minutes to complete. POCUS evaluation of the lower extremities for deep venous thrombosis has a sensitivity of 95% and specificity of 96%, compared with screening in the radiology setting and can also be completed in less than four minutes.

Given the benefits of different POCUS applications, interest in its use in the family physician's office is increasing. A 2014 survey of program directors found that only 2% of residency programs had a formal POCUS curriculum, but 29% indicated they had started one in the previous year and 11% were in the process of starting one. In 2016 the American Academy of Family Physicians (AAFP) passed a resolution encouraging all family medicine residency programs to include POCUS as part of their training and for the AAFP to increase continuing medical education offering that incorporate POCUS trailing.

(Above are excerpts from the fine editorial given by Paul Borneman, M.D. and Tyler Barreto, M.D., which appeared in the Aug. 15, 2018 edition of the "American Family Physician.)

****

DEMENTIAS

Dementia is not a disease it is a syndrome or group of symptoms .

Types: **Alzheimers** which makes up about 60% to 80% and is diagnosed on autopsy with amyloid plaques and neurofibulary tangles; **Vascular (25%)** which at autopsy shows evidence of sclerotic plaques in blood vessel walls (strokes etc.); **Dementia of Lewy Bodies (15%)** which at autopsy reveals protein alpha synuclein infiltrates in the neurone cells; **Parkinson's disease dementia with Lewy Bodies; Mixed dimentias; normal pressure hydrocephalus, drug & alcoholic dementias, & prione disease (Creutzfeldt-Jakob disease (live up to 4 years.), Mad-Cow disease or sheep brain diseaee.) which results in "spongy brain" on autopsy.** Reversible dementias include hypothyroidism, B-12 deficiency, Lyme disease and neuro syphilis.

One-half of people over 85 have a dementia 3% in those 64-75 and 19% in those between 75-84. Symptoms of all dementias include forgetfulness, behavior changes, time confusion & apathy.. To be diagnosed with dementia you have to have the symptoms for at least 6 months. Symptoms are progressive with a life span of about 8-years

Diagnosis is made by cognitive testing, CT-scans to help rule out normal pressure hydrocephalus, lab tests such as B-12, folic acid, TSH, C-reactive protein, SMAs.

Dementia is basically an autopsy diagnosis with Alzheimer's exhibiting atrophy, amyloid plaques, neurofibulary tangles; Lewy Body and Parkinson's disease dementias exhibit eosinophilic cytoplasm with inclusions of alpha synuclean and pigment depletion of the substantial nigra. Multiple mini infarcts are seen in vascular dementia.

There is no satisfactory treatment for the primary dementias although Donepezil may help in Lewy Body types along with acetylcholine type drugs and dopamine.

****

WARNING—MICROWAVING WATER

A young man decided to have a cup of coffee. He took a cup of water and put it in the microwave. It is not known how long he set the timer, but he wanted to bring the water to a boil. When the timer shut the oven off, he removed the cup from the oven. As he looked into the cup, he noted the water was not boiling, but **SUDDENLY** the water in the cup **BLEW UP** in his face. The cup remained intact until he threw it out of his hand, but all the water had flown out into his face due to the build-up of energy. His entire face is now blistered and he has 2nd decree burns to his face which may leave scarring.

He also may have lost partial sight in his left eye. While at the hospital, the doctor who was attending stated this is a fairly common occurrence and water alone should never be heated in a microwave oven. If water is heated in this manner, something should be placed in the cup to diffuse the energy such as a wooden stir stick or tea bag. etc. It is however, a much safer choice to boil the water in a kettle.

General Electric was consulted and replied: "*Microwave water and other liquids do not always bubble when they reach the boiling point. They can get superheated and not bubble at all. The superheated liquid will bubble up out of the cup when it is moved or when something like a spoon or tea bag is put into it. To prevent this, do not heat any liquid for over than 2 minutes per cup. After heating let the cup stand in the microwave for 30 seconds before moving it or adding anything into it.*

The local science teacher commented: I have seen this happen before. It is caused by a phenomenon known as supper-heating. It can occur anytime water is heated and will particularly occur if the vessel that the water is heated in is NEW, or when heating a small amount of water—less than half a cup. What happens is the water heats faster than the vapor bubbles can form. If the cup is new then it is unlikely to have small surface scratches inside it that provides a place for the bubbles to form. As the bubbles cannot form and release energy some of the heat has built up, the liquid does not boil, and the liquid continues to heat up well past its boiling point. What then happens is the liquid is bumped or jarred which is just enough of a shock to cause the bubbles to rapidly form and expel the hot liquid. The rapid formation of bubbles is also why a carbonated beverage spews when opened after having been shaken. **(Tnx to Arnold Kalan)**

THE WASHINGTON MONUMENT

One detail` that is seldom mentioned is that in Washington, D.C. there can never be a building of grater height than the Washington Monument.

On the aluminum cap, atop the Washington Monument are displayed two words: *Laus Deo*. No one can see these words. In fact most visitors to the monument are totally unware they are even there and for that matter, probably couldn't care less.

These word have been there for many years; they are 555 feet, 5 inches high, perched atop the monument, facing skyward to the Father of our nation, overlooking the 69 square miles which comprise the District of Columbia, capital of the U.S.A.

Out of sight and, one might think, out of mind, but very meaningfully placed at the highest point over what is the most powerful city in the most successful nation in the world.,

So, what do those two words, in Latin, composed of just four syllables and only seven letters, possibly mean? Very simply, they say "*Praise be to God!"*

Though construction of this giant obelisk began in 1848, when James Polk was President, it was not until 1888 that the monument was inaugurated and opened to the public.

From atop this magnificent granite and marble structure, visitors may take in the beautiful panoramic view of the city with its division into four major segments.

From that vantage point, one can also easily see the original plan of the designer, Pierre Charles L'Enfant...a perfect cross imposed upon the landscape with the White Housie to the north, the Jefferson Memorial to the south, the Capital to the east and the Lincoln Memorial to the west.

A cross you ask? Why a cross? What about separation of church and state? Yes, a cross; separation of church and state was NOT, is NOT, in the Constitution.

When the cornerstone of the Washington Monument was laid on July 4th, 1848, deposited within it were may items including the Holy Bible presented by the Bible Society. Praise be to God! Such was the discipline, the moral direction, and the spiritual mood given by the founders and first President of our unique democracy, "One Nation, Under God" *Laus Deo.*

***(*George Washington was supposedly a mixture of a deist & Anglican Christian who used the term "Providence" as an omnipotent, benign and beneficent being that by invisible workings in infinite wisdom dispensed justice in the affairs of mankind.)**

****

NOBEL AWARDED FOR CANCER BREAKTHROUGH

The Novel Prize was awarded to James P. Allison and Tasuku Honjo for discoveries that led to a new way to treat cancer by targeting the body's immune system rather than the tumor. Their work formed the backbone of new generations of blockbuster cancer immune-therapy drugs that are transforming treatment of some of the most intractable cancers..

Tumor cells have ways of evading destruction by the body's immune system. The new ways to release the brakes on immune cells known as T cells, allows them to attack cancers.

Dr. Allison realized that he could develop a way to block a protein called CTLA-4 on T cells that acts as a brake. The research led to the drug ***Yervoy*** which was approved by the FDA in 2011 to treat melanoma.

A similar concept was the basis behind the next wave of drugs targeting a protein called *programmed death receptor 1*, or PD-1, which also acts as a brake on immune-system cells.

Dr. Honjo felt that an antibody to PD-1 might complement the CTLA-4 inhibitors, and perhaps have fewer side effects.

The FDA began approving PD-1 inhibitors in 2014, including ***Keytruda*** and ***Opdivo***. (*Keytruda is the drug former President. Carter received in 2015 for his metastatic melanoma. His recent scans showed no recurrent signs of cancer.)*

Dr. Allison is a cancer survivor himself, of prostate and melanoma cancer and is currently undergoing treatment for bladder cancer.

WHEN TO DRINK WATER

How many folks do you know who say they don't want to drink anything before going to bed because they'll have to get up during the night?

Here are the answers from the Mayo Clinic: Drinking one glass of water before going to bed avoids stroke or heart attack because it avoids "thick blood" or dehydration. Secondly, gravity holds water in the lower part of your body when you are upright (legs swell slightly). When you lie down and the lower body (legs) seek level with the kidneys, it is then that the kidneys remove the water because it is easier. Also, you need your minimum water to help flush the toxins out of your body.

When is the correct time to drink water? Drinking water at a certain time maximizes its effectiveness on the body: 2 glasses of water after waking up—helps activate internal organs. 1 glass of water 30 minutes before a meal—helps digestion. 1 glass of water before taking a bath—helps lower blood pressure. 1 glass of water before going to bed—avoids stroke or heart attack

Water at bedtime will also help prevent night time leg cramps. Your leg muscles are seeking hydration when they cramp and wake you up with a Charlie Horse. (Gator-aid also works, replacing electrolytes and fluid.)

****

QUIZ TIME

What Q signal indicates that you are receiving interference from other stations? A. Q-signals are a system of making queries and exchanging information in an abbreviated form. They also allow operators who speak different languages to communicate. QRM refers to interference from other stations, QRN refers to interference from atmosphere static and QTH means the station's location. QSB indicates signal fading. QSY indicates that you are hanging frequencies.

How fast does a radio wave travel through free space? All electromagnetic energy—radio waves, light, X-rays—travels at the speed of light. In a vacuum, the speed of light is 300,000,000 meters per second. It travels close to that speed in air. In denser material such as water or glass, and in cables, light travels slower.

What is the radio horizon? The distance over which two stations can communicate by direct path. Since most propagation at VHF and UHF frequencies is line-of-sight, the limit of the range of these signals is called the radio horizon. There is some slight bending of radio waves along the Earth's surface, so the radio horizon is somewhat more distant that the visual horizon. Increasing the height of either the transmitting or receiving antennas also increases the radio horizon.

What should you do if something in a neighbor's home is causing harmful interference to your amateur station?

This is one of the benefits of being a licensed station—protection against interference While this means that the responsibility of stopping the interference may lie with your neighbor, you should still make sure the interference is not occurring because of some problem in your station If you are sure your station is operating properly, you may need to politely educate your neighbor about the interference and help identify the offending device.

****

DID YOU KNOW THAT...most heart attacks occur between 6 am and noon. Having one at night, when the heart should be most at rest, means that something unusual happened. Sleep apnea has been blamed.

If you take an aspirin or a baby aspirin once a day, take it at night. Aspirin has a 24-hour "half-life", therefore, if most heart attacks happen in the wee hours of the morning, the Aspirin should be strongest in your system if taken at bedtime.

The majority of people (about 60%) who have a heart attack while asleep, do NOT wake up. If you do, immediately take two aspirin (NOT sustained release) stat and sit up in a chair. DO NOT LIE DOWN and call 911.

THE DRUGS THAT COULD CURE CANCER

Taken from Dr. Ezekiel Emanuel's fine article in the WSJ, Sept. 22, 2018.

When I was training as an oncologist nearly three decades ago, we dreamed of curing cancer. Today, advances in cellular immunotherapy make it no longer a dream: A cure of cancer has become possible, even probable. But tragically, the costs of these drug therapies are so high that the American health care system can't afford them A potential revolution in cancer care may be stymied by the high price of drugs, which suggests that we need to reconsider how we price them.

Traditional cancer chemotherapies indiscriminately kill both cancer and normal cells. The new immunotherapies are far more discriminating. One of them, called CAR-T (*for chimeric antigen receptor T-cell therapy*), removes a patient's own immune T-cells and genetically re-engineers them to bind to a specific protein on the surface of the patient's cancer cells. Once reprogrammed, these T-cells are infused into the patient, attacking only those cancer cells with the protein targeted and sparing almost all normal cells.

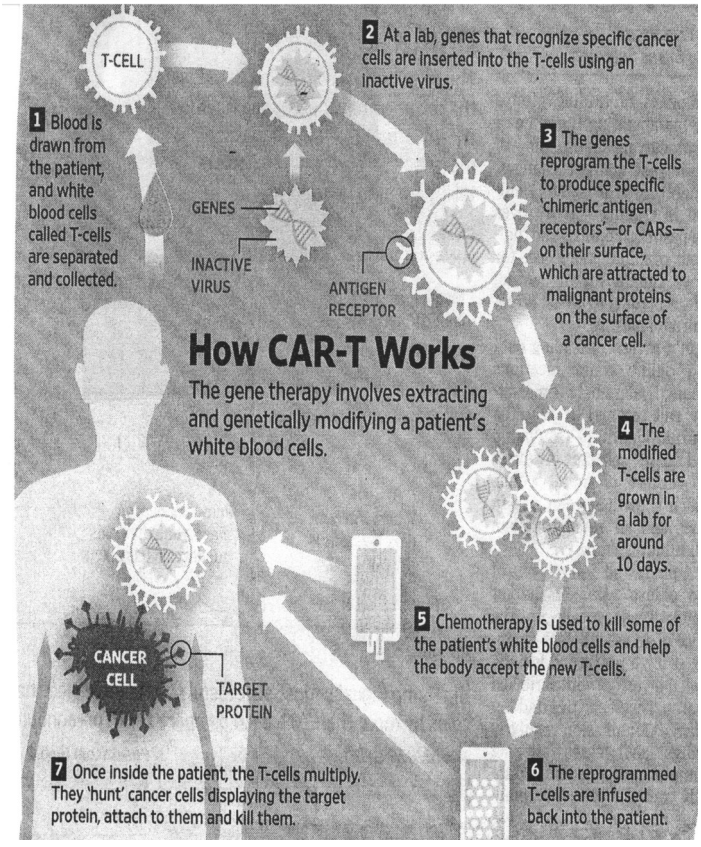
To date, hundreds of patients who were at death's door, whose cancer did not respond to known chemo, have been treated with CAR-T. About 2/3 of children with acute leukemia and about l/3 of adults with lymphoma and leukemia have achieved long-term remissions and seem to be cured.

Based on these data, the FDA approved two CAR-T treatments in 2017 and 2018—Kymriah and Yescarta. Today, there are over 400 ongoing clinical trials using similar cellular immunotherapies on different cancers, including breast and lung.

But there's a hitch: CAR-T's list price for Kymriah is priced between $375,000 and $475,000 per patient, depending on the type of cancer, and Yescarta at $373,000. When the costs of other necessary medical support is tallied, the total average cost for treatment rises to anywhere from $500,000 to $850,000 per patient. (*The drug companies say that they offer significant discounts to many patients, but because they won't release this data, the list price is all that we have to go on.)*

The extraordinary cost of these treatments presents a tragic dilemma: We may soon have a miracle drug for cancer whose cost, when multiplied across the country that needs it, could bankrupt the country.

Why are the prices for these new cancer treatments so exorbitant? The usual explanation is the cost of high-risk, innovative research….based on Kymriah's list price, treating just 2,700 patients would allow the drug company to recoup its entire investment. Even with significant discounts for many patients, it wouldn't take many treatments to turn a considerable profit.



They also offer another reason for the high price, saying that producing the immunotherapy requires more than 3 weeks of lab manipulations for each individual patient.

But according to researchers at the Univ. of Pennsylvania, the total cost for removing, reprogramming and infusing the cells into each patient is less than $60,000—just 1/6 of the $373,000 price tag.

Meanwhile, analysts at the research firm Coherent Market insights estimate that the global market for Kymriah and Yescarta will be more than $8.5 billion by 2028. And that seems like a conservative estimate. Gilead paid $11 billion for Kite Pharmaceuticals which developed Yescarta, obviously anticipating much higher revenue and profits.

It is hard to avoid the conclusion that the drug companies are charging so much for these revolutionary therapies' because It's what the market will bear—and what current public policy allows. If we are going to make immunotherapy and other cancer drugs available it will require a new approach with government in the lead.

First, FDA approval of every drug should be tied to national drug-pricing negotiations. No other developed country-including those without single-payer systems—allows drug companies to set the prices of their products, as we do in the U.S.

According to an analysis by the research firm GlobalData at the end of 2017, "collectively, the top 25 pharma companies reported a healthy average operating margin of 22% which increases to 25% for the top 10." This is more than enough profit to continue substantial research.

As an oncologist I am thrilled that we are reaching the point where patients once deemed hopelessly incurable can be cured. But as a citizen, I am worried that high drug prices, and high health costs generally will overwhelm the economy and the federal budget. Unless something changes the new immunotherapies for treating cancer will present us with a terrible choice between saving lives and seeing the country go broke.

Dr. Emanuel is the vice provost and chair of the department of medical ethics and health policy at the University of Pennsylvania. His most recent book is "{Prescription for the Future."

****

UPDATE: Science is moving rapidly in the field of biology...For the past few years we could only use Crispr to make cuts inside of cells and snip away portions of DNA. But now we have a paste function. We mix our Crispr component in just the right recipe, we can zap the T-cells with a bit of electricity to send in the genome—editing machinery. Then we can make edits that are about 750 nucleotides long at multiple sites, which starts to give us enough flexibility and real estate to give cells dramatic new functions. We're now able to paste in a new T-cell receptor, which is designed to recognize an antigen found on some cancer cells giving us T cells that attack only the cells that carry that signal—tumor cells!

This was total science fiction up until very recently! But because of the breakthrough, we can now get into the source code and fundamentally alter the capabilities of not just T ells but any cell type.

One of the first big ideas was that nanotechnology was going to cure all diseases with little silicon based robots circulating in our bloodstream. 20-years later it turns out those tiny machines are actually T cells taken from our own bodies, reprogrammed, and put back in. That's what crispr has the potential to offer: to make it easier to write new code in the language of genetics.

The difficulty is there are no two cancer cells alike—they are continually mutating, changing—even metastatic cancers have a different DNA than the primary cancer thus making it difficult to program the T cells to destroy all the malignant cells.

The practical advice to young people today is not to go into computer sciences; a much more exciting place to be is the world of biology. It's going through the same kind of transformation now that occurred in information technology 20 years ago.

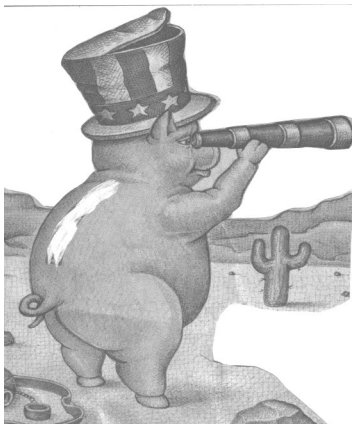
(information for above taken from the Oct. 2018 edition of "Wired"magazine.)

NEW FACES* for MARCO & RENEWALS, as of

Howard Davy, VE3AXD
Geo. Carrasco, W5GAC
Arthur Kahn, W6NJY
Larry Walker, K4KZA
Darrell Laughlin,W8EYE
Ken Bertka, K8KRB
Wm. Hablitzel, K8WEH

Expressed Interest
Takahide Kanatake, JJ1JSY
Martin Diamond, KA1WBN
Chris Davis, W8PJQ
Dettleff Olson, KD8EFM

Silent Key
Robt. Nevins, KF1J, age 92.



NO RADIO, NO ANTENNA?
Keep in touch with MARCO on "*listserve*" E-Mail your request to join to BruceSmall73@gmail. Com If on the list simply contact marco-ltd@googlegroups.com

And/or

Tune in to Marco Grand Rounds on your computer: www.reliastream.com/cast/start/tkeister

MEDICAL AMATEUR RADIO COUNCIL, LTD.,
New Membership Application & Renewal form

REGULAR MEMBERSHIP $25: A licensed professional in the health care field who holds an amateur radio license. A DX Membership is $25 in U.S. currency .

ASSOCIATE MEMBERSHIP $15: Anyone licensed or unlicensed who is interested in medicine and radio.

10 year Regular membership fee $200 (a saving of $50).
Associate membership for 10 years is $100 (also a saving of $50).

*Name:*_____
Address:

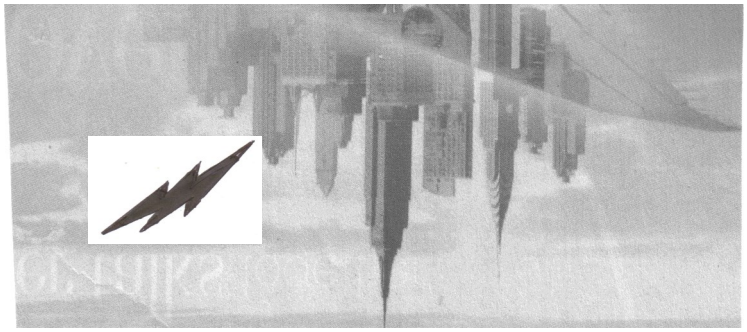
_____

_____
*Call Sign*_____ *Type License:*_____
*Phone:*_____
*Internet Address:*_____
*Your Birthday*_____ **(Year optional.)** *Member ARRL*__

Applications for membership should be sent to
Secretary Joseph Breault WB2MXJ,
1615 Brockenbraugh St., Metaire, LA, 70005
Email: wb2mxj@arrl.net

WHY NOT SEND A HAM FRIEND A MEMBERSHIP IN MARCO, $15, ONE WHO IS INTERESTED IN BOTH MEDICINE & RADIO.

Your Renewal Date
Is January 1 of each year



Web Site: http://www.marco-ltd.org

MARCO Grand Rounds is held every Sunday at 11 a.m. Eastern Time, 10 a.m. Central, 9 a.m. Mountain and 8 a.m., Pacific Coast time on 14.342. You qualify for one hour credit, Category II CME with your check-in.

MARCO NET SCHEDULE

DAY	EASTERN TIME	FREQ.	NET CONTROLS
Any Day	On the Hour	14.342	Hailing Frequency
Sunday	10:30 a.m.	14.140	N5RTF (CW-net)
Sunday	11 a.m.	14.342	KD4GUA

MARCO'S ***"AETHER"***

MEDICAL AMATEUR RADIO COUNCIL, LTD.,
P.O. Box 127, Indian Rocks Beach, FL., 33785
(Send dues to Jos. Breault, M.D., WB2MXJ, 1615 Brockenbraugh St. Metaire, LA 70005.)

114th
Edition
(2000-2018)
Dec. 2018