



WESTERN NEUROPATHY ASSOCIATION

February 2021
Issue 02
Volume 19

- Genetics And Family History: A Unique Way To Bridge The Distance Between Us : Part 2
- WNA Support Groups
- President's Report
- Alpha Lipoic Acid: The Universal Antioxidant
- Short Bits Of Info
- Pumpkin Power
- Neuropathy Medical Literature Review
- February Teleconference And Zoom Schedule



Awarded by
GuideStar
November 13, 2018

**WESTERN
NEUROPATHY ASSOCIATION**
P.O. Box 276567
Sacramento, CA 95827-6567
877-622-6298
888-556-3356
info@WNAinfo.org
www.WNAinfo.org

Celebrating our 23rd Year!

Neuropathy Hope

Hope through caring, support, research, education, and empowerment

A newsletter for members of Western Neuropathy Association (WNA)

GENETICS AND FAMILY HISTORY: A UNIQUE WAY TO BRIDGE THE DISTANCE BETWEEN US : PART 2

By Sonya Wells



Your family history holds key information about your past and clues to your future health. Many of your physical traits, such as eye color, hair color, and height are inherited. So, too, are risks for certain genetic conditions and health problems, such as heart disease, diabetes, and some cancers. You may have noticed that some of your relatives are healthier and live longer than other relatives. You may also have noticed that some relatives have the same health problems. By collecting your family's health history, you can learn what health problems you may be at increased risk for in the future and how to reduce your risks. For instance, people at increased risk for heart disease may be able to reduce their risk through not smoking, regular exercise and diet. Learning your family history can benefit both you and your relatives, and it can also bond you together.

When members of a family pass traits from one generation to another through genes, that process is called heredity. Family members share genes, behaviors, lifestyles, and environments that can influence their health and their risk for disease. Hereditary diseases can be higher in some families than in others, and your chances of having a hereditary disease can go up or down depending on your age, sex, and race or ethnicity.

Genetic factors likely play some role in high blood pressure, stroke, and other related conditions such as hereditary neuropathy. People with a family history of neuropathy are also likely to share common environments and other potential factors that increase their risk. The chances for hereditary neuropathy can increase even more when heredity combines with unhealthy lifestyle choices, such as alcohol abuse and eating an unhealthy diet.

You can find out more about genetics and disease on the CDC's Office of Public Health Genomics website.

Family health history is a record of the diseases and

health conditions that happen in your family. Family health history is a useful tool for understanding health risks and preventing health problems. To help people collect and organize their family history information, the CDC's Office of Public Health Genomics unit worked with the U.S. Surgeon General and other federal agencies to develop a web-based tool called My Family Health Portrait. You should check it out.



Genetic Testing, Privacy, and Healthcare

There are many different tests available for genetic diseases. Some people use direct-to-consumer testing to see whether they are at risk for certain genetic diseases. Genetic testing is also available through a genetic specialist or your primary care physician for things such as cancer screening, cardio-screening, and pharmaceutical diagnostic tools.

In the medical setting, your doctor will first determine if you would be a good candidate for genetic testing. People who have relatives with a genetic disease are often directed to genetic testing. There is also a counseling component, which explores what you plan to do with the results and how the results might affect you and your health.

Remember: a positive genetic test result does not necessarily mean that you have the disease now or will have it in the future. For many diseases, a positive genetic test can simply represent a higher-than-average risk of disease. This is especially true when looking at diseases that have environmental causes or gene-environment interactions.

Your doctor may offer you genetic testing under certain circumstances. You could receive genetic testing because you are pregnant and want to learn more about your baby, because you have a family history of a genetic disease, or to confirm a suspicion that you have a genetic disease.

- Continued on page 4

2021 WNA Board of Directors

Bev Anderson
President

Karen C. Polastri, IOM
Vice President

Pam Hart
Secretary

Darrell O'Sullivan
Treasurer

Sonya Wells,
PharmD, MPH
Director

Emeritus Council

Anne Bentz
Emeritus

Michael Green
Emeritus

Johnathan Istilar
Emeritus

Brad Livingood
Emeritus

Dick Ward
Emeritus

Lindsay Campoy
WNA Administration
(888) 556-3356
admin@pnhelp.org

Please contact
your group leader or
check your group
page on the
WNA website –
www.WNAinfo.org
to find out about the
topic/speaker for the
upcoming meeting.

Bev Anderson
Editor

Newsletter Design by

 **Diane Blakley**
Designs

Roster of Our WNA Information and Support Groups

Support groups are not meeting unless a leader notifies the group they are. If in doubt, call your Leader.

CALIFORNIA

Auburn

1st Monday, 11 AM
Woodside Village MH Park
12155 Luther Road
Sharlene McCord (530) 878-8392

Castro Valley

2nd Wednesday, 1:30 PM
First Presbyterian Church
2490 Grove Way (next to Trader Joe)
Joy Rotz (510) 842-8440

Concord

3rd Thursday, 1:30 PM
First Christian Church
3039 Willow Pass Road
Wayne Korsinen (925) 685-0953

Davis

2nd Tuesday, 3:30-5:00 PM
Davis Senior Center, 646 A Street
Mary Sprifke (530) 756-5102

Elk Grove

2nd Tues., 1 pm
New Senior Center
8230 Civic Center Dr.
Bev Anderson 877-622-6298

Folsom

3rd Wednesday, 12:30 PM
Association Resource Center
950 Glenn Dr., Suite 150
Bev Anderson (877) 622-6298

Fresno

3rd Tuesday, 11:00 AM
United Community Church of Christ
5550 N. Fresno St.
Bonnie Zimmerman (559) 313-6140

Grass Valley

2nd Monday, 1:30 PM
GV United Methodist Church
236 S. Church Street
Bev Anderson 877-622-6298

Merced

2nd Thursday, 1 PM
Central Presbyterian Church
1920 Canal Street
(Hoffmeiser Center across from the church)
Larry Frice (209) 358-2045

Modesto

3rd Monday, 10:30 AM
Trinity United Presbyterian Church
1600 Carver Rd., Rm. 503
Harkaman Ghag (209) 541-5404

Monterey

3rd Wed., 10:30 AM
Online Zoom Meeting
Dr. William Donovan (831) 625-3407

Napa

1st Thursday, 2 PM
Napa Senior Center, 1500 Jefferson St.
Ron Patrick (707) 257-2343
bonjournapa@hotmail.com

Placerville

2nd Wednesday, 1 PM
El Dorado Senior Center
937 Spring Street
Bev Anderson (877) 622-6298

Roseville

2nd Wednesday, 1PM (odd numbered months)
Sierra Point Sr. Res.
5161 Foothills Blvd.
Stan Pashote (916) 409-5747

Sacramento

3rd Tuesday, 1:30 PM
Northminster Presby. Church
3235 Pope Street
Sonya Wells (916) 627-0228

San Diego

3rd Monday, 1:30 PM
The Remington Club
16925 Hierba Dr.
Chhattar Kucheria (858) 774-1408

San Francisco

2nd Monday, 11 AM – 12:30 PM
Kaiser French Campus
4141 Geary Blvd. between 6th & 7th Ave.
Rm. 411A - Watch for signs.
Merle (415) 346-9781

San Jose

3rd Saturday, 10:30 AM
O'Conner Hospital, 2105 Forest Avenue
SJ DePaul Conf. Rm.
Bev Anderson 877-622-6298

Santa Barbara

4th Saturday, 10AM (Sept., Oct., Jan., March, May)
St. Raphael Catholic Church
5444 Hollister Ave., Conference Room
Nancy Kriech (805) 967-8886

Santa Cruz

3rd Wednesday, 12:30 PM (odd numbered months)
Trinity Presbyterian Church
420 Melrose Avenue
Mary Ann Leer (831) 477-1239

Santa Rosa

1st Wednesday, 10:30 AM
Steele Lane Community Center
415 Steele Lane
Judy Leandro (707) 480-3740

South San Diego

4th Thursday, 2 PM
Garden Room
3541 Park Blvd.
Jacklyn (858) 228-7480

Walnut Creek

4th Friday, 10 AM
Rossmoor, Hillside Clubhouse
Vista Room
Bev Anderson 877-622-6298

Westlake Village - Thousand Oaks

2nd Monday, 4:30-5:30 PM
United Methodist Church
Youth Classroom 1 (faces parking lot)
1049 S. Westlake Blvd.
Angie Becerra (805) 390-2999

NEVADA

Las Vegas

3rd Thursday, 1 PM
Mountain View Presbyterian Church
8601 Del Webb Blvd.
Barbara Montgomery
lvneuropathygroup@gmail.com

OREGON

Grants Pass

3rd Wed., 4:30 – 6:30 PM
(except July, Aug., and Dec.)
Club Northwest
2160 NW Vine Street
David Tally 541-218-4418

TEXAS

Austin

2nd Wednesday, 9:30-11:00 AM
Education Room
Conley-Guerrero Activity Center
808 Nile Street
Marty Meraviglia RN, ACNS-BC
(512) 970-5454 • mgmeraviglia@gmail.com

Houston

3rd Saturday, 1-2:30 PM
Online Zoom Meeting
klstenzel@hotmail.com

For information on groups in the following areas or any other place you are interested in finding out about a support group, call Bev Anderson at (877) 622-6298. She is actively trying to open new groups and re-open closed groups. Check with her about a group in your area especially if you would volunteer to be the leader.

New Leadership needed. No meetings for now. Contact for information: Bev Anderson 877-622-6298. California: Alturas, Antioch-Brentwood, Bakersfield, Berkeley – Oakland, Carmichael, Clearlake, Costa Mesa, Crescent City, Eureka, Fort Bragg, Garberville, Jackson, Lakeport, Lincoln, Livermore, Lodi, Madera, Mt. Shasta, Oxnard, Quincy, Redding, Redwood City, Salinas, Santa Maria, San Rafael, Sonoma, Sonora, Stockton, Susanville, Truckee, Tulare-Visalia, Turlock, West Sacramento, Weed, Ukiah, Woodland, Yreka, Yuba City-Marysville. Nevada: Reno-Sparks. Oregon: Brookings, Medford, Portland, Salem.

President's Report By Bev Anderson



Are you one that looks forward to Ground Hog Day on February 2? I am. I have a friend who has great fun with it and her humor brightens the days before and after as well. If spring is coming soon, cleaning supplies need to be made ready. If more winter is forecast, all the accommodations for winter need to be kept in place or improved. So, I wish you a Happy Groundhog Day. May whatever is forecast brighten your outlook on the season.

We plan to have another Webinar on February 27. We are in touch with a speaker. We will send out an email to announce the details and request reservations soon.

We have several videos of recent Webinars on our website. All you need to do is to go to www.WNAinfo.org and click on Resources and then Audio Visual. The new videos include Darrell O'Sullivan talking about Covid 19, Vaccines and 2021 and Sonya Wells dealing with Genetic Testing and family heritage topics. It is the oral presentation of the material in this newsletter (Part 1 was in January's issue). **The earlier webinar is by Karen Wagner on the pain medication from the campus of U.C. Davis in Davis.**

The upcoming clinical trial is 1b. The first trials are using the medication on healthy people to see if there are any side effects. There were none in 1a and none are expected this time. This one, however, is testing higher doses to see if there is a problem with it if more is taken. It is not expected to have side effects and we hope it will not. After that, before midyear we hope, there will be clinical trials with people that actually suffer pain to see how it works for different types of pain.

Karen has a grant to work with people with cancer pain to see how it helps. It is hoped that it will help people who are in chemotherapy and experiencing pain. Some of this pain may be neuropathy. The pain is so unbearable that they have to stop chemotherapy. It is hoped that the medication can help enough that they can continue the full course of the chemo. When she can do a full-sized trial to find out, it could be revolutionary. She also hopes that people transitioning from an opioid and being released from addiction will have an easier time with this medication helping them make the transition smoothly and less painful.

We asked you to write letters to your Senators. I'm delighted to let you know that Congress voted to pass the bill that funded the Armed Services Division for the coming year which included for the first-time funding in this annual bill for research in peripheral neuropathy. Researchers can apply for this funding which can greatly help the best research go forward. Some excellent possibilities for treatments don't get to patients because there is no funding available to take it through the required clinical trials. It takes several years to get them done even when the funding is in place.

The WNA Board of Directors made a decision at its January meeting that having an in-person Annual Conference in May this year is not yet doable. We don't know how things will go and if the vaccine will have gotten to everyone that wants it by then. Starting to plan it in the midst of the present crisis level would not make sense. So, the decision is to have a week long series of Zoom meetings on different topics but use an open screen approach where people can see each other and talk, ask questions, and interact with each other. Today, I was the speaker at the Houston, Texas, support group's Zoom meeting listed in this newsletter on page 2. Katherine Stenzel, Leader, does a beautiful job of facilitating the meeting with people interacting as one would in an in-person support group. People can also call in to participate. The voice can be heard and they can hear others but they can't be seen as there is no visual image coming through. Dates and times will be developed along with program details.

Winter Sale - People have asked about buying items from the winter sale listed in the December issue. You can list what you want to buy as the prices are listed and send a check for the total to WNA, P.O. Box 276567, Sacramento, CA 05827-6567. We plan to repeat the listing with an order blank in the March issue of this newsletter to make it easier. There will also be a way to order on line. The prices include sales tax so that makes ordering easier.

February 14 is Valentine's Day so I wish you a happy Valentine's Day and want you to know you are loved and appreciated by me and the rest of the WNA Board,

Bev

Help With Health Care Challenges

If the number is not in your area, call the one listed and ask for the right number.

Medicare

www.Medicare.gov

...

The Affordable Health Care Act

For current information go to www.HealthCare.gov

...

HICAP

Health Insurance Counseling

for seniors and people with disabilities.
www.cahealthadvocates.org/HICAP/
Call (800) 434-0222 to ask a question or to make an appointment.

...

Health Rights Hotline

Serving Placer, El Dorado, Yolo, & Sacramento Counties, regardless where you receive your health coverage.
Tollfree (888) 354-4474 or TDD (916) 551-2180.
In Sacramento, (916) 551-2100.
www.hrh.org.

...

HMO Help Center

Assistance
24 hours a day, seven days a week.
(888) HMO-2219
or (877) 688-9891 TDD

...

DRA's Health

Access Project Free publications about the health care, insurance rights and concerns of people with disabilities and serious health conditions. For more information, go to <http://dralegal.org/> and click on "Projects".

Genetics And Family History: A Unique Way To Bridge The Distance Between Us : Part 2 – continued from page 1

Some people receive genetic testing before or during pregnancy to see if they carry certain genetic variants that can be passed down to their children and cause specific diseases. People who carry the variants but do not have the disease are called carriers. They do not have the genetic disease, but if two carriers have a child together, the child could inherit the disease.

You can take a direct-to-consumer genetic test without involving your health care provider. Most testing companies require you to mail in a DNA sample. After analyzing the DNA, they will send you the results directly. It is important to consider potential effects of testing and the privacy policies of the companies offering the test.

Ancestry testing is a way to find out more about your family of origin and its history. It can be done without involving your health care provider, and is especially informative for people who do not know much about their biological family. Common ancestry tests are 23 and Me, CriGenetics, My Heritage, AncestryDNA, LivingDNA and FamilyTreeDNA. There is even genetic testing for dogs such as WisdomPanel.

The Genetic Information Nondiscrimination Act (GINA) is a federal law that protects against genetic discrimination in the workplace and health insurance. It also safeguards individual and family privacy of genetic information. With new advances in science, technology, and data management, GINA plays a vital role in establishing a baseline of protection for all Americans against discrimination.

Most health care providers are considered covered entities and must comply with the HIPAA Privacy Rules with regards to protected health information, including genetic information. More information about HIPAA can be found at HHS.gov.

Most research information is anonymous and only seen by those completing the research. When considering participating in a research study, be sure to ask how they will protect your genetic information.



It is estimated that 3-7% of the general population will be diagnosed with a recognized genetic disorder. This does not include common disorders such as cancer, diabetes, heart disease, and psychiatric disorders. All diseases or medical conditions have a genetic component (except trauma). Understanding how variations in an individual's DNA may affect disease and health is the focus of genomic medicine. This knowledge can lead to:

- Innovative ways to diagnose disease
- Earlier detection, by identifying genetic predisposition particular disease
- New approaches to treatment
- Development of designer drugs that target a mutation or its products (pharmacogenomics)
- Common Terms in Medical Genetics

Genetics is the study of genes and their effects.

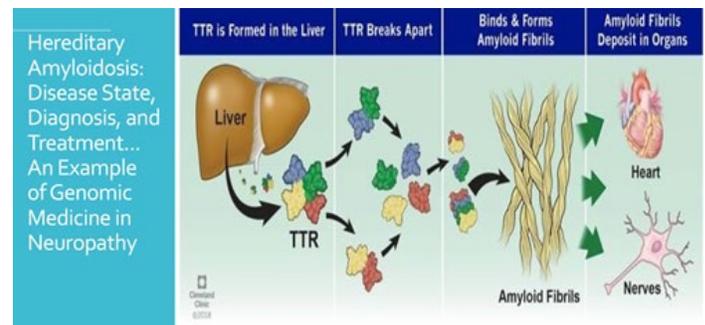
Genomics is the study not just of single genes but of the functions and

interactions of many genes in the genome (an organism's complete set of DNA, including all of its genes).

Medical genetics is any application of genetic principles to medical practice. This includes studies of inheritance, mapping disease genes, diagnosis and treatment, and genetic counseling. Some of the top genetics companies are Admera Health, Teloyears, Orig3n, and Helix.

Pharmacogenetics is the study of how drugs affect the body with respect to specific genetic backgrounds. Knowledge of these effects can improve effectiveness of drugs and minimize side effects on an individual –patient basis. Many companies such as Genomind and GeneSight test for psychiatric medications. With a new innovation called Next Generation Sequencing, PGx One Plus by Admera Health has emerged which tests for 18 different therapeutic categories and over 300 medications. Pharmacogenomics testing is a relatively new tool in your doctor's toolbox for picking the right drug at the right time in the right dose. Over 80 medications now require pharmacogenomics testing prior to dispensing, including cancer drugs, opiates, and psych drugs.

Testing is simple with an oral swab which is sent to the lab for DNA sequencing. The DNA results provide a lifetime utilization of information about your DNA involved in drug metabolism, potential interactions with drugs such as anesthesia causing malignant hyperthermia (a deadly reaction encountered on the operating table), and predispositions to hereditary diseases such as addiction, among other useful health information. Pharmacogenomics testing is covered by Medicare and other major health plans because of its beneficial information in aiding with optimal medication prescribing and general health prediction and care.



Amyloidosis (am-uh-loy-doh-sis) is a **protein disorder**. In this disease, proteins change shape (misfold), then bind together and form amyloid fibrils which deposit in organs. As amyloid fibrils build up, the tissues and organs may not work as well as they should.

Our bodies make several proteins that can cause amyloidosis. To choose the right treatment, it is very important to know the exact protein that is causing the disease. The two most common types are light chain (AL) and transthyretin (ATTR) amyloidosis.

Transthyretin (trans-thigh-re-tin), also called TTR, is a protein made by the liver that helps carry thyroid hormone and vitamin A in the blood. Normally, TTR is made up of four identical parts. However, in ATTR amyloidosis, the protein becomes unstable, breaks apart, and deposits in the heart and/or the nerves.

There are two types of ATTR Amyloidosis:

Hereditary (familial) ATTR amyloidosis. In this form, there is a change (mutation) in the DNA that is inherited and can be passed from one generation to the next. This makes the TTR protein more unstable and more

– Continued on page 5

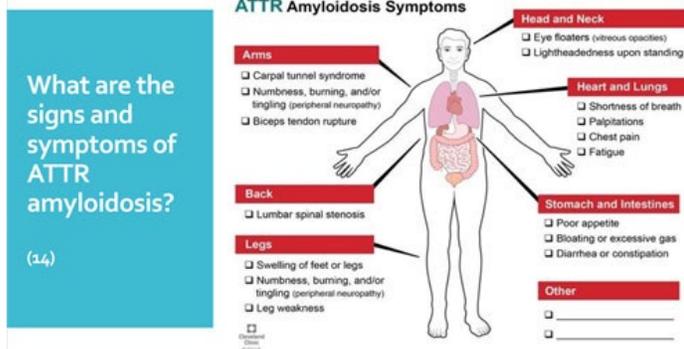
likely to form amyloid fibrils. Different mutations lead to different symptoms – some may affect the nerves; some may affect the heart; and some may affect both.

Wild-type ATTR amyloidosis. Unlike hereditary ATTR amyloidosis, wild-type does not involve abnormal DNA and cannot be passed on to family members. Instead, as you get older, the normal TTR protein becomes unstable, misfolds and forms amyloid fibrils.

These ATTR amyloid fibrils usually deposit in:

The wrist, in a narrow pathway called the carpal tunnel. This can cause carpal tunnel syndrome, which causes your hand and arm to become numb and tingle.

The spinal canal, which can cause narrowing of the spinal column (spinal stenosis). The heart, which can cause heart failure and/or an irregular heart rhythm called atrial fibrillation. Carpal tunnel syndrome and spinal stenosis can develop several years before heart failure. Early diagnosis of familial ATTR amyloidosis is very important to successful treatment. Because the disease is inherited, genetic screening can be an effective way to identify a patient's family members who may carry the mutation. If an individual is identified as carrying the genetic mutation for familial ATTR amyloidosis, further screening for manifestations of the disease is required. Additional screening will continue on a regular basis. Genetic counseling and testing for familial ATTR amyloidosis is available through the Stanford Amyloid Center and other research hospitals around the country.



ATTR Amyloidosis can affect all of these areas of the human body:

- Symptoms depend on the organs that are involved.

Symptoms indicating the arms are affected include:

- Carpal tunnel syndrome.
- Numbness, burning and/or tingling (peripheral neuropathy).
- Biceps tendon rupture.

Symptoms indicating the back is affected include:

- Lumbar spinal stenosis.

Symptoms indicating the legs are affected include:

- Swelling of the feet or legs.
- Numbness, burning and/or tingling (peripheral neuropathy).
- Leg weakness.

Symptoms indicating the head and neck are affected include:

- Eye floaters (vitreous opacities).
- Lightheadedness upon standing.

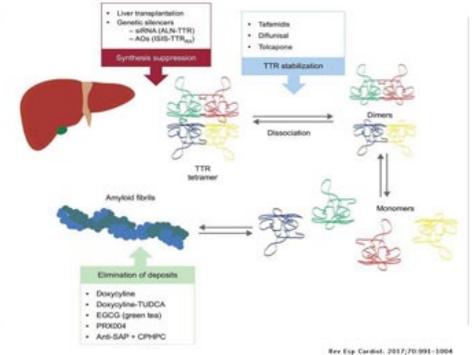
Symptoms indicating the heart and lungs are affected include:

- Shortness of breath.
- Palpitations.
- Chest pain.
- Fatigue.

Symptoms indicating the stomach or intestines are affected include:

- Poor appetite.
- Bloating or excessive gas.
- Diarrhea or constipation.

What treatments are available for patients with ATTR amyloidosis? A unique demonstration of medical genomics in neuropathy.
(15), (16), (17), (18)



Several medications have been approved by the Food and Drug Administration (FDA) for treating patients with ATTR amyloidosis. Other medications continue to be investigated.

ATTR silencers. These medications act on the liver to decrease the production of TTR. Two ATTR silencers have been approved by the FDA to treat patients with the hereditary type of ATTR who also have neuropathy.

Patisiran (Onpatro®) is an infusion that is given every three weeks. Patisiran, like many investigational drugs (including our future vaccine for COVID) uses RNA interference to achieve its therapeutic effects.

Inotersen (Tegsedi®) is an injection given once a week and requires weekly lab work.

Antisense oligonucleotide drugs (AO's) are short strands of oligonucleotides that bind to RNA and prevent translation. The preliminary data from an open-label phase 2 trial of ISIS-TTRRX revealed that 22 heart disease patients with wild-type and mutated ATTR who received weekly injections achieved a positive therapeutic effect with a favorable safety profile.

ATTR stabilizers. These medications stabilize the TTR protein, which in turn prevents it from breaking apart and forming amyloid fibrils.

Tafamidis (Vyndamax®, Vyndaqel®) is approved by the FDA for patients with hereditary or wild-type ATTR that has affected their heart.

Tolcapone binds to the thyroxine-binding pocket at the TTR interface making it a stronger aggregation inhibitor than tafamidis.

AG10 made by Eidos, right here in Northern California, is a medication currently being tested in a clinical trial. AG10 was designed to mimic a naturally-occurring variant of the TTR gene. (T119M), which also binds to the thyroxine-binding pocket at the TTR interface, is considered a “rescue mutation” because it has been shown to prevent ATTR in individuals carrying disease-causing, mutations in the TTR gene. To our knowledge, AG10 is the only TTR stabilizer in development that has been observed to mimic the “super-stabilizing” properties of this rescue mutation.

Diflunisal (Dolobid®) is a nonsteroidal anti-inflammatory drug (NSAID) that has been shown to also stabilize the TTR protein. However, this medication

– Continued on page 7

DISCOUNTS FOR WNA MEMBERS

The following companies or individuals have agreed to give WNA a discount to WNA members. Give them a call or visit. If you choose to purchase the service or wares of any on this list, pull out your WNA Membership Card and claim the discount.

Anodyne Therapy

Infrared Light Therapy equipment - **12% off all home units.**
Contact: 800-521-6664 or www.anodynetherapy.com

Auburn

The Footpath

825 Lincoln Way
(530) 885-2091
www.footpathshoes.com
WNA Discount: 10% off the regular price shoes.

Elk Grove

Shoes That Fit

8649 Elk Grove Blvd.
(916) 686-1050
WNA Discount: 20% off the regular price shoes.

Fortuna

Strehl's Family Shoes & Repair

Corner of 12th & Main
1155 Main Street
(707) 725-2610
Marilyn Strehl, C.PED
is a Certified Pedorthic
WNA Discount: 10% off the regular price shoes.

West Sacramento

Beverly's Never Just Haircuts and Lilly's Nails

2007 W. Capitol Ave
Hair - (916) 372-5606
Nails - (916) 346-8342
WNA discount: 10% off the regular price.

- Continued on page 7

ALPHA LIPOIC ACID: THE UNIVERSAL ANTIOXIDANT By Casie Terry

Alpha lipoic acid acts as a powerful antioxidant throughout the entire body, though it has especially remarkable antioxidant activity in the brain. It's sometimes called the "universal antioxidant" because it's both fat and water soluble. That means it can move in and out of cells with ease and can get from your blood into your brain.

Alpha lipoic acid is a coenzyme that occurs naturally within the body. It's vital to the energy and protection of all cells, and because it's involved in the production of energy from carbohydrates, it may also play a role in reducing insulin resistance.

What Can Alpha Lipoic Acid Do For You?

Alpha lipoic acid helps turn glucose (sugar) into usable energy in the body. It works with other nutrients to accomplish this. It is active alongside the B vitamins and aids in the production of energy. It also enhances and prolongs the antioxidant effects of vitamin E and glutathione, helping to prevent oxidative damage to the nerves and brain.

Since alpha lipoic acid also possesses the unique ability to cross the blood brain barrier, it promotes brain health and protects the brain's cells from free radical damage. Research shows that alpha lipoic

acid may be useful in the treatment of eye and nerve damage. It has been used therapeutically for diabetic nerve pain (neuropathy), dementia, chronic fatigue syndrome, cancer, liver disease, high blood pressure, high cholesterol, Lyme disease and even weight loss.

Should You Take an Alpha Lipoic Acid Supplement?

If you're looking for an all-around anti-aging supplement with a lot of antioxidant firepower, the answer is yes. While some people can benefit from greater amounts for therapeutic purposes, any amount provides valuable antioxidant protection. Natural production of this nutrient declines with age and declines even further with many progressive diseases so it is best to take higher doses after the age of 50.

How Much Alpha Lipoic Acid Should You Take?

The usual recommendation is 600 mg per day. Most users buy the 300 mg. capsule and take one in the morning and one in the evening with food. Some find that getting the 600 mg. capsule and taking it once a day works well, too. The 600 mg capsule is a bit larger than the 300 mg one.

SHORT BITS OF INFO

Are eggs recommended? McMaster University involved 177,555 women and men and found one egg a day did not affect their heart health. The connection between dietary cholesterol and blood cholesterol levels is not what was thought in the past. So, yes you can eat eggs. They are a good source of protein and other nutrients.
- ON HEALTH, May 2020

Keep pets away from your pills. Young and small dogs are especially vulnerable to human drugs. If you find that they have eaten your pills, they should see a veterinarian immediately.
- ON HEALTH, May 2020

Walking helps your brain. It was found that regular walking helps mentally. Regular aerobic exercise helps your brain keep healthy.
- ON HEALTH, May 2020

Most comprehensive study of whole cancer genome. Tim Stephens, UC Santa Cruz, Thursday, February 6, 2020, wrote an article telling about the full research done on the cancer genome which involved 1,300 scientists and clinicians from 37 countries. More than 2,600 genomes of 38 different tumor types were analyzed. This is a great resource in aspects of cancer's development, causation, progression, and classification. Further research will be guided by the findings.

PUMPKIN POWER

This article might be surprising to see this time of the year but I wanted you to be sure to know about its year-round value. If you have bowel issues like constipation due to medications or even diarrhea, you might find pumpkin is your friend. With cats, it is given a teaspoon or more raw from a can as recommended by their veterinarian. For humans, pie is the preferred ingestion route. This is why I regularly year-round bake pumpkin pies. I let them cool, cut them in basically

in eight pieces, sometimes more or less, put them spread out a bit on a cookie pan, and put them in the freezer of the refrigerator. After a few hours or the next day, I put them in a large freezer bag or two and put the bags in the freezer. About every three or four days, I take a piece out, put it on a plate, give it 60-90 seconds in the microwave and have it with or without whipped cream for an after-dinner treat. It can even be counted as a vegetable serving besides the inner comfort it can provide.

NEUROPATHY MEDICAL LITERATURE REVIEW By William B. Donovan, M.D.

We can access the National Library of Medicine (NLM) to obtain information on peripheral neuropathy (PN). There are over 100 medical articles a month written on PN.

I review these references and select articles that would appear to be most interesting to us neuropathy sufferers. This is the link to **PubMed** that will connect to the **NLM: www.ncbi.nlm.nih.gov/sites/entrez**

If you are reading this article on the computer, just click on the above link to go there. If you are reading the print edition of the newsletter, type this link into the address bar of the browser on a computer. If you don't know how, get a librarian or friend to help you.

After you get to **PubMed**, you will see a line that says "**Search PubMed**" followed by "**for**" and a space. Every article in the **NLM** is given a **PMID**, an eight digit identification number. I will give you **PMID** numbers of the selected articles. Type the **PMID** into the space after the "**for**" and click on "**Go**" at the end of the space, or press the ENTER key on your keyboard. You will then see a one paragraph abstract of the article appear, as well as links to related articles.

The reader can also go to the WNA website www.pnhelp.org, click on the RESOURCES tab and select MEDICAL LITERATURE REVIEW from the menu to review the archive of summaries that have appeared in this column over recent years. This month's PMIDs:

- 30225985 This randomized double-blind placebo-controlled trial of the Indian herb Ajwain (*trachyspermum ammi* Sprague) in a 10% topical cream was compared to placebo in 92 neuropathy patients. Statistically significant reduction in feet burning, numbness, tingling and allodynia was found.
- 30061320 A group of patients with painful diabetic neuropathy was randomly assigned, 63 each, to a twice weekly electroacupuncture and a control group without. Those providing the treatment and patients receiving the treatment were not blinded, but the evaluators were. They found 82.5% improvement versus 34.1% at 9 weeks on completion of the study. Later follow-up showed continued improvement with Pain Intensity Rating Scale at 9.30% compared to 20.30%.
- 31967283 This article describes the treatment of atypical chest pain due to intercostal neuropathy using an improved method of injecting between the ribs first with an anesthetic, followed with alcohol distally. This technique resulted in a significantly better result at both one and three months.
- 32379676 This is a randomized controlled study comparing the effects of aquatic exercise, massage and control on nerve growth factor (NGF), glycemic control and balance on patients with diabetic neuropathy. The most significant effect on NGF, glycemic control and balance was produced by a combination of massage and aquatic exercise.

Genetics And Family History: A Unique Way To Bridge The Distance Between Us : Part 2 – continued from page 5

has not been fully studied in patients with ATTR that has affected the heart and also may not be tolerated due to side effects.

Fibril disruptors. These medications may help break up and clear ATTR amyloid fibrils. Doxycycline (antibiotic) and green tea extract (over-the-counter supplement) have only been tested in small studies and there is limited evidence that these medications would be helpful in treating amyloidosis.

Prothena, another biopharmaceutical company in the Bay Area, is diligently working on PRX004, is an investigational monoclonal antibody designed to specifically target and clear the misfolded (toxic) forms of the TTR amyloid protein found in ATTR amyloidosis.

Because TTR is made in the liver, a liver transplant is also a possible treatment for patients with some hereditary forms of ATTR amyloidosis, but not for those with wild-type form.

So, you can see that alongside the biopharmaceutical companies that are working tirelessly on a vaccine for the COVID 19 virus,

there are other biopharmaceutical companies who are passionate about bringing new hope to people with hereditary neuropathies through medical genomics.

So, whether you are inspired to find out more about your family heritage or want to enhance your healthcare through medical genomics testing, realize that genetics offers an endless vision into what makes you "you". Feel free to research my references and more about genetics, hereditary neuropathies, and advances in medical genomics. And, know that whether you are joining with relatives to find your common bonds, or discovering your own unique characteristics, we are all in this together!

The end of the presentation.

Thank you very much!
Sonya Wells, PharmD, MPH



DISCOUNTS FOR WNA MEMBERS

Continued from page 6

Neuropathy Support Formula/Nerve Renew

(1-888-840-7142) is a supplement that a number of people are taking and reporting it has helped them. The company gives members of WNA a discount and free shipping. The 30-day supply is \$40 (normally \$49.97). It can be auto-shipped monthly for the same. A 3-month supply via auto-ship is \$95.00. They also have a Nerve Repair Optimizer that is available for \$20 with free shipping. Marsha, the manager, said that if anyone wants more information about the product, they can call and ask for her. If she is not readily available, leave your number and she will call you back. They now have Nerve Renew Fast Acting Cream at \$20 for WNA members. It reportedly takes the edge off numbness.

Building Better Balance DVD, Developing Spine Health

– The DVDs are \$30 each. The price of a full set (4 DVDs) is \$100 (that's a 20% discount). You can order the DVDs by going to the website www.building-better-balance.com. Shipping is free. You can also order the DVDs over the phone using a credit card. Call (707) 318-4476 and leave a message" Vanessa Kettler, Balance and Fall Prevention www.building-better-balance.com (707) 318-4476

Additional Discounts

Do you know a business that might offer our members a discount? Tell them that they will be listed each month in our newsletter and on our website so our members will know of their generosity and patronize their business. Call (877) 622-6298 or e-mail info@pnhelp.org.

We'll mail an agreement form to the business, and once we have it, we'll add them to this list.



WESTERN NEUROPATHY ASSOCIATION

A California public benefit, nonprofit,
tax exempt corporation

P.O. Box 276567, Sacramento, CA 95827-6567

Call WNA using our toll free phone numbers:

(877) 622-6298 ■ Email: info@WNAinfo.org

■ PN Information/Advice ■ Support Group Inquiries

(888) 556-3356 • Email: admin@WNAinfo.org

■ Membership Information/Inquiries ■ Sponsorships

■ General Organizational Inquiries ■ www.WNAinfo.org

2 WNA WEBINARS ADDED TO WEBSITE:

- **COVID-19 Vaccines and 2021**, with Darrell O’Sullivan
- **Genetics and Family History**, with Sonya Wells

Check them out at <https://pnhelp.org/resources/audio-and-video>

FEBRUARY TELECONFERENCE AND ZOOM SCHEDULE

Anyone is welcome to join any of the following calls. We urge you to join this opportunity for being on a call with other people that know about neuropathy.

- **February 8** (Monday) 6:30 PM PDT
- **February 10** (Wednesday) 1:00 PM PDT
- **February 16** (Tuesday) 1:30 PM PDT – Sacramento
- **February 17** (Wednesday) 1:00 PM PDT
- **February 20** (Saturday) 10:30 AM

HOW TO CALL IN TO TELECONFERENCES

At the meeting time, call this number: **1-877-366-0711**. You will hear an automated voice ask for the pass code to join the conference call. Using your telephone keypad, dial **36199447#**. A notification sound will chime in the “conference room” so we know someone has joined the call, and we will welcome you.

ZOOM MEETINGS

- **Monterey, CA Neuropathy Support Group:** Wednesday, February 17, 10:30–11:30am PST, 12:30-1:30 CST by online Zoom. Sign-in opens at 10:00 AM. For Zoom link – email Bill Donovan MD at seabreezexo9@gmail.com, giving name, address, telephone number and email address. Do this even if you have done it before this. He may have a new link to give you.
- **Houston, TX Neuropathy Support Group:** Saturday, February 6, 1:00-2:00 PM CST, 11 AM PST by online Zoom. For Zoom link – email Katherine Stenzel at klstenzel@hotmail.com, giving name, address, telephone number and email address.



Western Neuropathy Association (WNA)

A California public benefit, nonprofit,
tax-exempt corporation.

Bev Anderson, Editor

P.O. Box 276567

Sacramento, CA 95827-6567

(877) 622-6298 ■ (888) 556-3356

info@WNAinfo.org ■ www.WNAinfo.org

WNA Headquarters: admin@WNAinfo.org

Our mission is to provide support, information and referral to people with neuropathy and to those who care about them, to inform and connect with the health care community, and to support research.

Dues - \$30 a year

All contributions and dues are tax-deductible.

We are supported by dues-paying members, contributions by members and friends, and occasionally, small grants and fundraisers.

This newsletter is designed for educational and informational purposes only. The information contained herein is not intended to substitute for informed medical advice. You should not use this information to diagnose or treat a health problem or disease without consulting a qualified health care provider. Western Neuropathy Association (WNA) does not endorse any treatments, medications, articles, abstracts or products discussed herein. You are strongly encouraged to consult a neurologist with any questions or comments you may have regarding your condition. The best care can only be given by a qualified provider who knows you personally.