

FootSteps

TOWARD PROGRESS

The newsletter dedicated to finding a better way to live with erythromelalgia
Volume 8, Issue 1, March 2007, Published by The Erythromelalgia Association, www.erythromelalgia.org

Mayo Doctors Report New Treatment, Study Findings

Led by dermatologist Mark D.P. Davis, M.D., physicians at the Mayo Clinic in Rochester, MN, U.S., present a new EM treatment and report results of studies testing the effectiveness of diagnostic procedures, among other subjects, in 2006 journal articles.

This interdisciplinary team of specialists in dermatology, neurology, and vascular medicine—with special expertise in EM—had six EM-related articles published in 2006 in such journals as the *Archives of Dermatology* and the *Journal of the American Academy of Dermatologists*.

Possibly the most interesting to people with EM is an article that outlines a new treatment option—“Combination Gel of 1 % Amitriptyline and 0.5% Ketamine to Treat Refractory Erythromelalgia Pain.”

Dr. Davis and neurologist Paola Sandroni, M.D., Ph.D.,

describe prescribing a gel that may be applied to areas affected by EM up to five times a day. The gel contains a novel combination of amitriptyline, a tricyclic antidepressant long used in treating EM, and ketamine, an anesthetic.

Five patients, all severely affected by EM, tested the gel. Four of the five reported a dramatic decrease in pain associated with use of the gel; one reported no response to it. The patients who improved noticed a change within hours of starting to use the gel.

Compounding Necessary

While the gel must be compounded by a pharmacy, it offers the flexibility of easy application and the potential for combination with other treatments.

The authors caution, however, that larger scale studies are needed to systematically evaluate response rate before it can be generally prescribed.

Physicians at the Mayo Clinic have evaluated more than 200 people with EM in the past 40 years. They now use sophisticated diagnostic tests available at few other centers.

Specialized tests, for example, evaluate how well

nerves in the skin function while others test for temperature, blood flow, and blood oxygen levels in the toes, feet or hands, both when EM symptoms are present and when they are not.

Sweat Test Effective

Another article—“Thermoregulatory Sweat Testing in Patients with Erythromelalgia”—documents the effectiveness of TST, one of these specialized tests.

This study found most of the people with EM they studied have small-fiber neuropathy—a disorder in which the small nerve fibers do not function adequately, and TST is a sensitive and useful test for detecting small-fiber neuropathy.

Biopsies Not Useful
Yet another study published in 2006 concluded that skin biopsies were not useful in diagnosing EM or helpful in planning treatment. Mayo researchers re-examined a total of 33 skin biopsy specimens taken from people with EM who had been seen at Mayo during the past 27 years.

Another journal article—“Erythromelalgia”—is an update of a paper of the same name from 2002. Authors Dr.

(Continued on page 2)

Also In This Issue

Q and A.....	2
EM and Arterial Damage.	3
TEA Annual Report	4
Financial Reports	5
Your Stories	6
Letter from President.....	7
2007 Goals.....	7
Networking	8
New Volunteers.....	8

Mayo Doctors Report

(Continued from page 1)

Davis and colleague Thom Rooke, M.D., of the division of vascular medicine at the Mayo Clinic, revised the “Pharmacologic Treatment” section, including new data from case reports and studies published since 2002.

People with EM and their doctors should find that section especially informative, along with the revised list of drugs used for treating EM, and the “Approach to Management of Patients with EM.”

A letter by Drs. Davis, Rooke and Francesca Williams, M.D., printed in the *Archives of Dermatology* comments on the need for more systematic study of the extremities affected by EM between episodes.

The doctors reviewed their notes of patient visits and test findings for the 52 patients examined at Mayo between 1997 and 2005.

In two-thirds of these EM patients, the feet and/or hands were noted to be cool and discolored (with the color varying between a blue to purple) between episodes of EM. The doctors suggest that the problem affecting the blood vessels during EM flares is present between flares as well.

They suggest that EM may fit into a continuum of blood vessel disease, potentially caused by a disorder of the small nerve fibers in the skin. They also speculate that Raynaud’s phenomenon and EM may have similar causes.

Q and A by Gayla Kanaster

In the last issue **Karen Kimble**, South Bend, IN, U.S., asked:

Q. Does humidity affect other people with EM?

Nicki Greer, Aurora, Ohio, U.S., answered:

A. “I definitely am affected by humidity. I have terrible attacks of flaring and am so hot I have to cover my arms, legs, neck and face with cool water. I will be interested to know how others feel.”

And **Caroline Mettavant**, Paris, France, answered:

A. I have reason to believe that humidity has been the trigger of my EM crisis.

Nicki Greer wants to know:

Q. What food and drinks affect EM?” And asks:

Q. Does caffeine have an affect on flaring?

Pam Costa, University Place, WA, U.S., finds that her most intense EM pain occurs after a short period of sleep, even after falling asleep with no pain. She dreads taking a nap or falling asleep too early in the evening. She asks:

Q. Does anyone else wake up with pain and redness in their feet and legs after sleeping a short time?

John Forbush, Austentown, Ohio, U.S., asks:

Q. Has anyone noticed the affect smoking has on EM?

Send answers and new questions to Gayla Kanaster at GaylaKanaster@aol.com or write to her at 2532 Fremont St., Tacoma, WA, USA 98406.

The Erythromelalgia Association

200 Old Castle Lane, Wallingford, PA, USA 19086

www.erythromelalgia.org

Beth Coimbra, President

Isabelle Davis, Vice President

Gayla Kanaster, Secretary

**To contact: memberservices@erythromelalgia.org
or call 610-566-0797**

Gayla Kanaster, Co-Chairperson, Networking Program
2532 N. Fremont St., Tacoma, WA, USA 98406

Judy Reese, Co-Chairperson, Networking Program
1155 E. Duck Lane, Salt Lake City, Utah, USA 84117

Isabelle Davis, *FootSteps* Principal Writer/Editor
isabelle.davis@gmail.com

FootSteps is the official publication of The Erythromelalgia Association and is published quarterly for its members. Any information contained in this publication is protected by copyright and may not be reproduced without express permission from the editor. The intent and purpose of this publication is to inform those with EM or their friends and families—not, in any way, to provide medical advice.

Arterial Damage Can Cause Secondary EM

By Jean Jeffery

Jan Michiels and colleagues in the Netherlands have written many papers about EM and the blood disorder thrombocytopenia (TH). One type of EM is secondary to (caused by) TH in which the numbers of platelets or clotting cells in the blood are very high.

The normal platelet count is 200-500 x 10⁹/ liter of blood. In TH the platelet count can rise to 1500-2000 x 10⁹/ ltr. The paper by Michiels¹ summarised here explains how EM is caused by TH and then treated. It can be found in TEA Articles (General section).

The Patients with EM

Michiels studied a group of 26 patients with EM and TH, which included 17 men and 9 women aged between 33 and 74 years. (Half of these patients also had very high counts of red blood cells.) EM affected the feet in 18 patients, hands in 6 and both hands and feet in 2. One foot or hand only was affected in 13 subjects. Symptoms of the feet were confined to the sole of the fore-foot or one or more toes and those of the hands were limited to the finger tips. A few patients also had areas of EM on their upper legs. Everyone experienced severe burning pain, redness, warmth and swelling.

The platelet counts were all above 500 x 10⁹/ ltr. Counts

were above 1000 in 9 patients and 2 had counts approaching 2000. Symptoms of EM preceded the diagnosis of TH in all but one of the 26 patients. The majority (19) were diagnosed with TH within 3 years of their first EM symptoms, 5 at 3 - 5 years, and one much later at 13 years.

Laboratory Investigations

The platelets are produced in the bone marrow and released into the bloodstream. Bone marrow biopsies were taken which showed the presence of increased numbers of platelet-producing cells in the marrow in 20 of the 26 patients. Skin biopsy samples were also taken from the areas of skin affected by EM. On examination they revealed abnormal changes in the arterioles (small arteries). The arterioles were inflamed and their blood flow restricted by overproduction of new muscle in the inner layer of their walls. Many arterioles were also partly blocked by clots. The inflammation, arteriolar changes and clotting are caused by the increased numbers of platelets. They produce inflammatory prostaglandins and clump together to form the clots.

Treatment

The patients were treated with the two drugs aspirin and bisulfan. It was found that aspirin relieved the pain of EM and

healed the damaged arterioles. A single 500 mg dose of aspirin relieved the EM within a few hours and lasted for 4 days. The effectiveness of aspirin is due to its ability to inhibit the enzyme cyclooxygenase. This enzyme is converted in the platelets to inflammatory prostaglandins. Aspirin also prevents the platelets from clumping together to form clots. The chemotherapy drug bisulfan was given alongside aspirin to treat the TH. Bisulfan lowers the production of platelet-forming cells in the bone marrow so the numbers of platelets in the blood fall to normal levels.

Remission of TH and the disappearance of EM continued for between 2 to 10 years in 20 of the 26 patients after their platelet counts fell below 350 x 10⁹/ ltr. In 8 patients EM re-occurred, but long-term treatment with aspirin again completely relieved EM.

Since this paper was written, new findings about the role of abnormal platelets in EM have been published². Treatment of EM continues to be successful with aspirin (one 500 mg dose followed by a maintenance dose of 50 mg daily) and a platelet-lowering drug to reduce the platelet count below 400 x 10⁹/ltr. Hydroxyurea, anagrelide or interferon have now largely replaced bisulfan.

¹Erythromelalgia caused by platelet-mediated arteriolar inflammation and thrombosis in thrombocytopenia. Michiels JJ, Abels J, Steketee J, van Vliet HH, Vuzevski VD. 1985. *Annals of Internal Medicine* 102:466-471. (TEA Articles, General Section)

² Platelet-mediated erythromelalgic, cerebral, ocular and coronary microvascular ischemic and thrombotic manifestations. Michiels JJ, Berneman Z, Schroyens W, et al. 2006. *Platelets* 17(8): 528-544.

2006 Annual Report: Accomplishments

2006 was a year of new directions for TEA. The Web site was completely rebuilt. As a result, an online directory of members became a reality, making networking easier. TEA sponsored a major educational event for members—its first teleconference. Lennia Machen, president since TEA's founding in 1999, stepped down in January 2006. Beth Coimbra assumed the presidency.

- TEA sponsored its first teleconference, “Dr. Cohen on EM,” an educational event for members and their families. Response from the 70 participants was very positive to the hour-long live interview with Jay Cohen, M.D., adjunct associate professor of Preventive Medicine at the University of California, San Diego, and a TEA-founding member.
- TEA's Web site was completely rebuilt to take advantage of various technological advances. Members can now renew their memberships or make donations online because the Internet financial management service PayPal was integrated into the site. Using PayPal's secure service, new individuals can become paid members and enjoy full benefits immediately. Much of the information on the site was updated as well.
- A directory of TEA members also now is on the Web site—achieving a longstanding TEA goal to improve opportunities for communication among members. Although the directory is visible only to those in the association, members can opt to keep their listings private and accessible only for administrative purposes.
- TEA funded a one-year \$30,000 research grant through the National Organization of Rare Disorders. Receiving the grant “kickstarted the studies” of recipient Joost P H Drenth, M.D., Ph.D., Professor of Molecular Gastroenterology and Hepatology, Radboud University, The Netherlands.
- Thanks to the efforts of TEA members, EM was in the news again last year. The 15-minute segment featuring member Pam Costa, Ph.D., ran multiple times on the Discovery Health Channel. England's *Real People Magazine* chronicled the challenges member Jayne Nicholl has faced living with EM since childhood. The *Wilmington News Journal*, Wilmington, Delaware, U.S., told TEA President Beth Coimbra's story. Awareness of EM among physicians was raised by the approximately 15 EM-related presentations made at scientific meetings around the world by Yale's Stephen G. Waxman, M.D., Ph.D., and his team. When any of the Yale researchers described their research findings, they explained EM in detail.
- TEA's leadership was successfully transitioned to Beth Coimbra from Lennia Machen, who had served as president since the founding of TEA in 1999. Coimbra had been vice president since 2003. Assuming the vice presidential slot was Isabelle Davis who is also the editor of *FootSteps*. Longtime treasurer and member services representative Ray Salza also stepped down. The treasurer duties have been assumed by Beth Coimbra and the member services responsibilities have been divided among the remaining board members.
- The Networking Program in the U.K. and Europe got its own local coordinator, Peter Rowland of Cleveland in the U.K.
- TEA raised \$19,873 for the Research Fund. Another \$9,607 was donated for the unrestricted use of the organization.

2006 Annual Report: Financial Reports

These reports are presented in a new format that brings TEA into compliance with U.S. requirements for nonprofit organizations.

THE ERYTHROMELALGIA ASSOCIATION

Balance Sheet

As of December 31, 2006

Assets

Cash – Operating Account	\$8,263
Short – term securities	<u>\$55,633</u>
Total Assets	<u>\$63,896</u>

Fund Balances

Operating Fund Balance	\$12,508
Research Fund Balance	<u>\$51,388</u>
Total Fund Balance	<u>\$63,896</u>

THE ERYTHROMELALGIA ASSOCIATION

Statement of Activities (Income Statement)

For the year ended December 31, 2006

	<u>Unrestricted</u> <u>Operating fund</u>	<u>Restricted</u> <u>Research Fund</u>	<u>Total</u>
<u>Revenue and Support:</u>			
Contributions and grants			
General	\$9,607	-	\$9,607
Research	-	\$19,873	\$19,873
Memberships:			
New	\$3,011		
Renewals	<u>\$7,449</u>		
Articles, CDs & Other	\$552	-	\$552
	<u>\$20,619</u>	<u>\$19,873</u>	<u>\$40,492</u>
Interest Income	-	\$2,092	\$2,092
Total revenue and support	<u>\$20,619</u>	<u>\$21,965</u>	<u>\$42,584</u>
<u>Expenses:</u>			
Program			
Memberservices/Treasurer	\$1,961	-	\$1,961
FootSteps	\$3,740	-	\$3,740
What'sWhat/Articles fulfillment	\$569	-	\$569
Teleconference	-	\$824	\$824
Website services	\$1,303	-	\$1,303
Management & general			
Insurance	\$948	-	\$948
Teleconference line	\$936	-	\$936
Bank charges (credit card fees)	\$642	-	\$642
Washington State fee	\$20	-	\$20
NORD membership fee	\$75	-	\$75
Fundraising			
Web Design Consultant	\$3,500	-	\$3,500
Total expenses	<u>\$13,695</u>	<u>\$824</u>	<u>\$14,519</u>
Change in net assets	<u>\$6,924</u>	<u>\$21,141</u>	<u>\$28,065</u>
Net assets – beginning of year	<u>\$5,584</u>	<u>\$30,247</u>	<u>\$35,831</u>
Net assets – end of year	<u>\$12,508</u>	<u>\$51,388</u>	<u>\$63,896</u>

Your Stories—everyone has one!

TEA encourages you to share your experience by writing your story. We can help you write and edit your story. We ask only that you limit what you write to 400 words. Please send it to Gayla Kanaster, gaylakanaster@aol.com or 2532 N. Fremont Street, Tacoma, WA, USA.

Caroline Mettavant

writes: I'm a 23-year-old French woman. Though I had burning pain in my feet for several years, my EM worsened dramatically during Dec. 2005. I had been in Taiwan more than a year and my feet were more and more frequently getting red, hot and seemed full of blood, even when I hadn't been walking for a long time. The pain of "heavy legs" also worsened at this time, my legs tired quickly and I couldn't stand for more than one or two hours per day.

I began to look for help as I couldn't sleep anymore during the night. I lay on my bed, my legs against the wall and ice under my feet, waiting for the morning. Paradoxically, I was shivering too, as I felt very cold in the upper part of my body. Unfortunately, not one of the doctors I saw in Taiwan knew what could be my problem.

It's a doctor friend of ours in France who first told me about EM. After being repatriated in my hometown in Jan. 2006, I was hospitalized in the department of a dermatologist, who put me on topalgic intravenously. I could find some relief. Later, I took gabapentin 300 mg, from 1-3 per day. We also added Effexor 37.5mg (2/day) to help me to sleep better. I was then able to leave the

hospital and continue to live more or less "normally" with these three medicines. (I also tried Loxen 20mg without success.)

This year (2006/07) the dry and cold winter of my native region, in northeast of France, allowed me to reduce to 600 mg of gabapentin and 100 mg of Topalgic per day. But, as soon as hot summer returns, I know I'll have to increase the doses again and avoid any outdoor activities. Nonetheless swimming generally brings me great relief. I try my best not to think about the possibility that my EM may worsen in the future and keep exercising.

I want to thank TEA for its support and also every member who wrote their story so that I could see that many people live very well with EM. More than all, I have to thank my mate, who has always been so patient and understanding with my "eccentric" pains.

Jane Donald writes: My name is Jane Donald and I am a retired lady who revels in voluntary work to keep me occupied. I have four grandchildren who are a delight, especially as they do not live next door!

Having suffered with EM since January 2003, I have come to rely on *Footsteps* for

help and advice. I was diagnosed within 3 months, for which I am extremely grateful, because I was then able to find the TEA website.

I see a dermatologist every six months when she does her best to alleviate my symptoms. She gladly receives relevant information from the newsletter when I think it could help my problems. She knows very little about the disease as I am her only patient with EM.

Her consultancy covers quite a large area of southeast England. She did consult a colleague in London who had some experience with EM. On her advice I started using Prozac 20 mg at night and ginkgo biloba in capsule form daily.

This regime suited me and gave me some relief, especially at night. I do find, if I get a good night's sleep, I can cope with the discomfort during the day.

That was 2004, which included a major operation to remove a cancerous tumour in my bowel. It rather puts my EM in perspective. However, I have recovered well and as far as can be seen, have been cured. They caught it in time!

2006 sees me taking pregabalin (Lyrica) 75 mg twice daily for relief of neuralgia in my feet plus Atarax 50 mg (antihistamine) at night, which makes me drowsy.

(Continued on page 7)

From the President

Financial Reporting Improved, Initiatives Planned



Beth Coimbra

The 2006 Annual Report on pages 4 and 5 summarizes TEA's accomplishments and reports the organization's financial status at year end.

We can be proud of our goal-oriented achievements, but I want to focus, first, on the financial reports—reports

presented in a format that is new for TEA.

As some of you may know, I was asked to join TEA's board some years ago because of my background in nonprofit accounting. I am now using this knowledge to bring our financial reporting up to industry standards.

It is my hope, first, that this information helps demonstrate to you that the board of directors is meeting its duties as caretaker of TEA's funds.

In addition, TEA now has a basis to compare its financial results with other, similar nonprofits. That's because these reports now comply with U.S. requirements for nonprofit or-

ganizations.

Reports like these will also be required by potential grantors who need relevant information to make decisions regarding TEA.

Looking ahead, the board has set some ambitious goals for 2007. Because increasing income is key to accomplishing those goals, improving fundraising is among them.

I am confident TEA will continue to offer you valuable information about EM and help fund appropriate research projects. I hope we can provide more services to you.

I ask that, if possible, you support TEA and its board—by volunteering or making donations—and help us achieve our goals.

Board Sets Goals for 2007

The year 2007 holds promise that TEA will make a difference in the lives of people with EM through education, information and support. The board of directors has set these goals for 2007.

- Endeavor to increase income to support operational expenses by soliciting donations through targeted appeals
- Continue raising money for the Research Fund and investing fund monies judiciously
- Assist people with EM and their physicians to create successful treatment plans by conducting a publishable survey of TEA members that collects data about the therapies they use and the success of those treatments
- Continue offering educational opportunities like teleconferences, increased Web site services, and an enhanced Article Archive
- Continue to increase public and physician awareness of EM through media exposure

Your Stories

(Continued from page 6)

I do still play tennis for which I pay a price, but think it is worth it. When I am at home I am barefoot all the time and seeking solace on cold floors.

The latest innovation in my drug regime is cyproheptadine 4 mg 3x daily. This was mentioned in a June 2006 *Footsteps* article.

Again my dermatologist was receptive to new ideas for which I am eternally grateful. I have definitely found more relief from the flaring of my feet. It is less intense and less frequent. Marvellous!

Keep *Footsteps* coming, PLEASE!

Networking Without Computers

TEA still offers the Networking Program, a service for people who don't have easy access to the Web site. Program co-chairperson Judy Reese will give you the names of other members in the Networking Program who live in your geographic area. Just fill out the form below and send it to Judy, **1155 E. Duck Lane, Salt Lake City, Utah, USA 84117.**

I want to participate in the TEA Networking Program.

Signature _____

Name (Please print) _____

Street _____

Province _____

Country _____

Zip/Postal code _____

(Optional) Phone _____

E-mail _____

New Volunteers Answer Call

Members who have answered the board of directors' call for volunteers include **Nicki Greer**, Aurora, Ohio, U.S.

Diagnosed with EM two years ago, Nicki is helping with member services responsibilities until a permanent member services representative is found. She sends TEA welcome letters to new members along with a packet of TEA information and sample copies of *Footsteps*.

Regina Bayer, a member and mother of board member Deborah Mosarski, will assist the treasurer preparing the annual IRS tax form 990 starting next January.

Are you good at organizing? Fundraising? More member volunteers are needed for many jobs—big and small—within TEA. Just send a note to MemberServices@erythromelalgia.org

Directors Needed

TEA's board has two open positions. If you want to serve on the board, just send an e-mail to Gayla Kanaster at GaylaKanaster@aol.com