7 Steps to Developing a Beneficial Response to Stress

Dr. Marie Gerhard-Herman is a cardiovascular medicine specialist at Brigham and Women’s Hospital (BWH). In addition, she is an associate professor of medicine at Harvard Medical School.

In her clinic at Brigham and Women’s Hospital, Dr. Gerhard-Herman sees on a daily basis the effects that stress can have on patients who are recovering from a cardiovascular disease, such as a blood clot. Recognizing that high levels of stress can have a dramatic impact on how a patient heals, she has made a point to start educating as many patients as possible on how to recognize the signs of unhealthy levels of stress and simple techniques they can use to better manage this stress.

EVERYONE HAS STRESS
STRESS WILL AFFECT YOUR HEALING

The goal is to change your response to stress, so that stress results in less ill effect.

1. The goal should be to be BETTER and not focus on perfect.
   Start slow.

2. Recognize stress.
   Stress is the body’s response to anything. There is so much stress every day that people stop recognizing it. (See Signs of Stress). Adrenaline goes up and sex steroids go down with each stress response.

   Stress response has been described as fight (freeze) or flight response: Your body redirects resources by shutting down digestion and selective vasoconstriction of arteries. You can see rapid breathing, high heart rate, dry mouth and shakiness.

3. Change your breathing the instant you feel stress.
   Belly breathing is a simple way to improve stress response. It is a new way of breathing for many. You breathe in deeply and your abdomen expands like a balloon, hold for 4 seconds, then you blow it all out for 4 seconds. Practice with your hand on your belly. Start by practicing this 4 times a day, or whenever you feel stress.

   “BreathingApp” is a helpful tool and is free for smart phones.

4. Positivity is more beneficial than negativity.
   Automatic negative thoughts are ingrained in many people, and are not
Upcoming Events

New Strategies for the Treatment and Management of Anticoagulant Bleeding
May 7 – The Westin Copley-Boston
Join NATF for the first installment of a brand new educational series focusing on anticoagulant associated bleeding. Hear effective new strategies to treat and manage patients with anticoagulant associated bleeding from key opinion leaders. Discussions will include warfarin related bleeding, best practices to minimize bleeding in a patient having a procedure, treating major bleeds while on a DOAC, and strategies for anticoagulating vulnerable patients.
Register for the program at: NATFonline.org/events

In-Person Blood Clot Support Group at BWH
May 21 – Brigham and Women’s Hospital, Boston, MA
All support groups start at 7:00 p.m. and are held at Brigham and Women’s Hospital.
To register, email info@natfonline.org or call 617-730-4120.

Let’s Heal Together – A Post Thrombotic Limb Support Group – an NATF Sponsored In-Person Blood Clot Support Group
Coming in May
New York City, NY
Let’s Heal Together – A Post Thrombotic Limb Support Group is a newly-formed, monthly support group for New York City based patients, family members, and caregivers affected by post thrombotic syndrome. If you’ve suffered from a deep vein thrombosis and your leg has just never felt the same, join this support group.
For more information and to register, please email Heather Paulson-Soussou at hpaulson26@optimum.net

Spring Patient Program
May 16 – The Westin Waltham
Join NATF for optimal ways to identify and treat polyvascular disease including cardiovascular disease, peripheral arterial disease, and cerebrovascular disease. This program is designed exclusively for patients, their family, friends, and the community by NATF’s panel of expert physicians. It will provide insight into polyvascular disease: what it is, who is at risk, and how it relates to your cardiovascular health.
Register for the program at: NATFonline.org/events

Online Blood Clot Support Group
April 8 with Dr. Christian Ruff – Genetics and Blood Clots: What’s in the Genes?
May 20 with Dr. John Groarke – Cancer and VTE: What’s the Connection?
June 18 with Dr. Margaret Fang – Update on Anticoagulant Reversal Agents
July 9 with Dr. Steve Deitelzweig – Discussion on Atrial Fibrillation
NATF’s Online Blood Clot Support Group offers patients the opportunity to share common concerns, offer support to one-another, and learn up-to-date and accurate information, including new research on blood clot prevention and treatments. Dates and speakers for our upcoming meetings can be found at natfonline.org/patients/support-groups.
To register for this online support group, please email info@natfonline.org.

Cardiology Updates with Pri-Med
May 20 – Anaheim, CA
Oct 29 – Rosemont, IL
Dec 11 – Baltimore, MD
NATF is working with Pri-Med is bring you CME designed by cardiologists for cardiologists. As a cardiologist, your knowledge of and expertise on the latest clinical guidelines is crucial for optimizing the care of your patients with cardiovascular comorbidities and risk factors. Participate in this complimentary CME program that meets your specialized educational needs by providing you with the most up-to-date clinical evidence from respected thought leaders in cardiovascular medicine. Check the NATF website (natfonline.org) for more dates and keep an eye out for NATF in a city near you.

For more information on any of these events, please email events@natfonline.org. We look forward to hearing from you!
However, even with anticoagulant treatment, about half of patients with DVT wind up with long-term leg problems. This complication, called "post-thrombotic syndrome" or "PTS", typically causes patients to experience daily leg pain, swelling, heaviness, and fatigue. Some patients with PTS develop permanent skin changes on their leg, and some experience skin breakdown with open sores ("ulcers") that are often slow to heal. People with severe PTS can have difficulty completing normal daily activities or working, and experience poor quality of life. Unfortunately, there currently exists no consistently effective, evidence-based treatment. Common approaches use compression therapy (usually stockings) or medications, but these methods usually do not provide enough relief to patients with PTS of moderate or greater severity.

In recent years, imaging-guided, catheter-based treatments have been used to try to reduce symptom severity in selected patients with PTS. This can involve placement of metallic stents to re-open large veins that are blocked by old clots, or catheter-based procedures to eliminate valve reflux (backwards blood flow) in the surface veins of the leg. Early experiences suggest that these methods may be helpful for at least some patients. However, they have never been carefully studied in well-designed clinical trials, so doctors do not know if the benefits are worth the risks and inconveniences for most patients.

The Chronic Venous Thrombosis: Relief with Adjunctive Catheter-Directed Therapy (C-TRACT) Clinical Trial is an ongoing, multicenter randomized clinical trial that is evaluating the ability of catheter-based procedures (known as "endovascular therapy" or "EVT") to reduce PTS severity and improve quality of life in patients with moderate-to-severe PTS. The study is sponsored by the National Heart Lung and Blood Institute (part of the National Institutes of Health) and is led by Dr. Suresh Vedantham at the Washington University School of Medicine in St. Louis, MO, in partnership with other leading doctors.

In this study, all patients who choose to participate receive close monitoring and optimal standard PTS care that includes medications, compression therapy, and (if they need it) quality venous ulcer care. Half of the patients are randomly assigned to also undergo EVT procedures. All patients are followed for 2 years to see which treatment strategy (EVT or No-EVT) is most effective in reducing PTS severity, improving quality of life, and healing venous ulcers.

Participation in the C-TRACT study enables patients to learn about their condition and receive state-of-the-art PTS treatment with close monitoring, and to create new knowledge that will help providers improve care for future patients. Providers are encouraged to download the C-TRACT Referral App, which enables quick referral of potential study patients. Interested physicians can also apply to serve as site investigators.

For more information, please visit bloodclotstudy.wustl.edu or contact the C-TRACT Clinical Trial Manager, Angela Oliver at 1-866-974-CLOT (2568) or CTRACT@wustl.edu.

Bring Support to your Community!

NATF is looking for patients or healthcare providers that would like to start a blood clot support group in their area.

With short appointment times, it can be difficult for patients to get the answers and support they need to understand and process their blood clot diagnosis. Starting a blood clot support group with the North American Thrombosis Forum can help!

Don’t take our word for it! One Boston support group member described their experience as, “Very encouraging. It became very clear that life after a blood clot is certainly a possibility and a real positive possibility.”

If you, or someone you know, may benefit from starting a blood clot support group, email events@natfonline.org to learn more.
helpful. The first task is to RECOGNIZE negative thoughts (See Identifying Negative Thoughts). The second task is to develop a positive response.

5. It is what you do every day that counts. Exercise is a key component.

Exercise is essential to wellbeing and begins with walking 20 minutes a day. Arm cycling or other options can be used. Drink plenty of water and eat vegetables daily.

Try to identify these frequent stress signals in yourself.
After one week, try to respond to the signal with 2 belly breaths (see above).

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>COGNITIVE</th>
<th>EMOTIONAL</th>
<th>BEHAVIORAL</th>
<th>RELATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold fingers</td>
<td>Trouble thinking clearly</td>
<td>Overwhelming sense of pressure</td>
<td>Decreased exercise</td>
<td>Resentment</td>
</tr>
<tr>
<td>Blotchy skin</td>
<td>Forgetfulness</td>
<td>Nervousness</td>
<td>Overuse of alcohol</td>
<td>Judgement</td>
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<td>Headaches</td>
<td>Lack of creativity</td>
<td>Anxiety</td>
<td>Teeth grinding</td>
<td>Clamming up</td>
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<tr>
<td>Indigestion</td>
<td>Memory loss</td>
<td>Boredom—no meaning in things</td>
<td>Skipping meals</td>
<td>Burrowing</td>
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<tr>
<td>Stomach aches</td>
<td>Loss of sense of humor</td>
<td>Edginess</td>
<td>Crying</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Sweaty palms</td>
<td>Inability to make decisions</td>
<td>Intolerant</td>
<td>Hair twisting</td>
<td>Lack of intimacy</td>
</tr>
<tr>
<td>Tiredness</td>
<td>Racing thoughts</td>
<td>Feeling powerless to change things</td>
<td>Overeating</td>
<td>Distrust</td>
</tr>
<tr>
<td>Back pain</td>
<td>Negative thinking</td>
<td>Easily upset</td>
<td>Jumpiness</td>
<td>Less contact with friends</td>
</tr>
<tr>
<td>Tight neck/shoulders</td>
<td>Ruminations</td>
<td>Anger</td>
<td>Loss of sleep</td>
<td>Using people</td>
</tr>
<tr>
<td>Racing heart</td>
<td>Fixating on something</td>
<td>Loneliness</td>
<td>Difficulty getting things done</td>
<td></td>
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<tr>
<td>Restlessness</td>
<td></td>
<td>Sad</td>
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<tr>
<td></td>
<td></td>
<td>Emptiness</td>
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Source: Benson Henry Institute for Mind Body Medicine

6. Identify Negative Automatic Thoughts

Thoughts are shaped by underlying expectations and beliefs. They can be positive or negative, helpful or unhelpful. **Negative automatic thoughts arise when we feel threatened, often without us even being aware of them.**

Negative automatic thoughts are linked with negative moods and feeling, this makes it difficult to distinguish between thoughts as rational (useful) and irrational (ineffective coping and unhelpful behaviors).

Example: You lose your job. Negative automatic thoughts “I will never find another job” “I’m a loser” “My life is ruined”

These negative thoughts are distorted and will likely lead to unhelpful behaviors like staying at home or not talking to anyone about the situation, which creates even more negative emotions.

7. Avoid Thought Distortions

**All or nothing:** Black and white thinking that perceives events at an extreme. Language reflecting this may include _always_ and _never_.

E.g. You are in the slowest line at the supermarket and say “I always pick the slowest line.”

**Mental filter:** Focus on one negative detail and not the whole. This can darken perception of reality like a drop of ink into a beaker of water.

E.g. You are having a happy reunion until someone recalls an insignificant mistake that you once made, and that ruins the evening for you.

**Mind reading:** Thinking that another person thinks negative of you without sufficient evidence or considering other possibilities.

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E.g. A colleague disagrees with you at a meeting and you think, “He thinks I do not know what I am talking about.”

**Fortune telling:** Predicting a negative future without enough information. This habit of thinking contributes to anxiety and against a favorable outcome.

**Magnification/minimization:** Magnifying the significance of trait beyond its significance in the whole.

**Should statements:** Having a rigid idea of how you and others should behave and an exaggerated idea of how bad it is if these expectations are not met.

**Personalization:** Accepting more than your fair share of responsibility for a problem.

**Comparison:** Maladaptive when it leads to feelings of superiority and inferiority.

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**EXAMPLES OF ADAPTIVE EMOTIONS / PERSPECTIVES:**

<table>
<thead>
<tr>
<th>Acceptance</th>
<th>Determination</th>
<th>Gratitude</th>
<th>Openness</th>
<th>Stability</th>
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</thead>
<tbody>
<tr>
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<td>Growth</td>
<td>Patience</td>
<td>Stillness</td>
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<td>Discipline</td>
<td>Harmony</td>
<td>Peace</td>
<td>Strength</td>
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<td>Appreciation</td>
<td>Dignity</td>
<td>Honor humility</td>
<td>Perseverance</td>
<td>Surrender</td>
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<td>Awe</td>
<td>Ease</td>
<td>Individuality</td>
<td>Positivity</td>
<td>Tolerance</td>
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<td>Enthusiasm</td>
<td>Inspiration</td>
<td>Presence</td>
<td>Transformation</td>
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<td>Faith</td>
<td>Integrity</td>
<td>Power</td>
<td>Trust</td>
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<td>Fearlessness</td>
<td>Intuition</td>
<td>Purity</td>
<td>Truth</td>
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<td>Commitment</td>
<td>Fidelity</td>
<td>Joy</td>
<td>Purpose</td>
<td>Vigilance</td>
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<td>Clarity</td>
<td>Flexibility</td>
<td>Justice</td>
<td>Responsibility</td>
<td>Vulnerability</td>
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<td>Courage</td>
<td>Forgiveness</td>
<td>Kinship</td>
<td>Reverence</td>
<td>Will</td>
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<td>Compassion</td>
<td>Friendship</td>
<td>Leadership</td>
<td>Sacrifice</td>
<td>Willingness</td>
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<tr>
<td>Curiosity</td>
<td>Freedom fulfillment</td>
<td>Love</td>
<td>Serenity</td>
<td>Vitality</td>
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<td>Creativity</td>
<td>Generosity</td>
<td>Mastery</td>
<td>Service</td>
<td>Worthiness</td>
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<tr>
<td>Confidence</td>
<td>Grace</td>
<td>Noble</td>
<td>Spontaneity</td>
<td>Wisom</td>
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STAFF

Kathryn Mikkelsen
Executive Director
KMikkelsen@natfonline.org

Courtney Johnson
Associate Director
CJohnson@natfonline.org

Kelly Meredith
Assistant Director, Events and Outreach
KMerideth@natfonline.org