#### **WEBINAR & TELELEARNING SERIES**





#### Workout Your Worries: Exercise and Anxiety in MS



August 9, 2016

Presented by:



Teva Pharmaceuticals | Acorda Therapeutics

Mallinckrodt Pharmaceuticals Autoimmune and Rare Diseases

US Bank | United Way of Eagle River Valley



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#### How to Ask Questions During the Webinar:

• Chat Feature – Type in your questions using the chat box on the lower left hand side of your screen.







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### **Anxiety and MS**

- An abnormal and overwhelming sense of apprehension and fear often marked by physiological signs, doubt concerning the reality and nature of the threat, and self-doubt about one's capacity to cope with it.
- One of the most common mood-related symptoms experienced by over 54% of MS patients.
- 18.6% of MS patients have general anxiety disorder at any time (compared to 5.1% in the general population).
- Loss of functions and altered life circumstances caused by the disease can be significant causes of anxiety.



National MS Society, "Emotional Changes," <u>http://www.nationalmssociety.org/Symptoms-</u> <u>Diagnosis/MS-Symptoms/Emotional-Changes#section-5</u>; Julie Stachowiak, "Anxiety and MS," MS Connection Blog, <u>https://www.msconnection.org/Blog/September-2014/Anxiety-and-MS</u>



#### Anxiety/Stress Response Vs. Relaxation/Rest Response





http://kimberlysnyder.com/blog/2012/08/24/adrenal-fatigue-how-to-recognize-it-and-what-to-do-about-it/

### **Anxiety in the DSM 5**

\*Generalized Anxiety Disorder (GAD) **Specific Phobia** Social Anxiety Disorder (Social Phobia) Agoraphobia Panic Disorder Panic Attack Post-Traumatic Stress Disorder **Obsessive-Compulsive Disorders** Substance/Medication-Induced Anxiety Disorder





#### Anxiety Disorder Decision Tree



Baldwin DS, et al. Journal of Psychopharmacology, 19(6) (2005) 567-596.





### **Generalized Anxiety Disorder**

#### **Two Key Features:**

- Excessive or chronic worry, "what if...?" type statements
- High level of physical tension and nervousness





#### **Generalized Anxiety Disorder** For Diagnosis:

- Difficulty stopping or turning off the worry
- Symptoms must be present for at least 6 months
- 3 or more of the following:
  - Restlessness, feeling keyed up, or on edge
  - Easily fatigued
  - Difficulty concentrating or mind goes blank
  - Irritability
  - Muscle tension



Sleep disturbance



### **MS and Anxiety**

Up to 40% of persons with MS experience anxiety

GAD: ~20% (6.2% in general population) Associated with exacerbations, pseudo-exacerbations, depression

Panic Disorder: 2.1%OCD: 5.7%Social phobia: 2.1%PTSD: 2.1%Specific phobia: 2.9%





# Reducing Anxiety: Exercise





### **Exercise and Mood**

- Elevation of endorphins
- Exercise alone/group, indoors/outdoors, or supervised/unsupervised all may be helpful
- Exercise is not a cure for anxiety
- Active people less depressed than inactive people







### Move your muscles..... Aid your Anxiety

- Exercise may be as effective as antidepressants or anti-anxiety medications
  - May minimize incidence of depressive relapse
- Resistance training and mixed training may be more effective than aerobic alone for depression management in one study
- Aerobic exercise seems to be most effective type of exercise thus far
- Unclear the exercise intensity required to help with anxiety/depression/stress management





### Aerobic Exercise: Research to Real Life

- 20 minutes treadmill walking (light, moderate, or high intensities) resulted in 45 minutes of mood improvements
- Arm Bike reduced depressive symptoms in more advanced MS
- More frequent sessions generally more effective
- Start to feel some short term effect within 5 minutes of the aerobic activity
- 12-13/20 RPE increase to 15-16/20
  - Medications can interfere with HR response
- Duration of 10-15 minutes increase to 20-30 minutes

<u>General recommendation</u>: 2-3x/week for 20-30 minutes at intensity of 12-16/20





### Rating of Perceived Exertion Scale (RPE)

6	
7	VERY, VERY LIGHT
8	veni, veni elam
9	VERY LIGHT
10	
11	FAIRLY LIGHT
12	
13	SOMEWHAT HARD
14	
15	HARD
16	
17	VERY HARD
18	A DECEMBER OF THE PARTY OF
19	VERY, VERY HARD
	VERY, VERY HARD

Borg Rating of				
Perceived Exertion				
0	Nothing At All			
0.5	Very, Very Light (Just noticeable)			
1	Very Light			
2	Light (Weak)			
3	Moderate			
4	Somewhat Hard			
5	Heavy (Strong)			
6				
7	Very Heavy			
8				
9				
10	Very, Very Heavy (Maximal)			

http://www.crossfit1080.com/2014/08/your-heartsreaction-to-exercise-while-crossfitting/



# Reducing Anxiety: Cognitive Behavioral Therapy





### Cognitive Behavioral Therapy (CBT)









### Trigger, Situation, or Environment (CBT)

A diagnosis of MS/ Living with MS **Financial Concerns** Negative feedback from a work supervisor Conflict with a significant other or loved one Getting honked at by another driver **History of abuse** Death of a loved one





### **Polling question #1**

• What has triggered your anxiety?

A diagnosis of MS/ Living with MS Financial Concerns Negative feedback from a work supervisor Conflict with a significant other or loved one Getting honked at by another driver History of abuse Death of a loved one





#### Unhelpful Thinking Styles



PSYCHOLOGYTOOLS.org

### Thoughts (CBT)

What was going through your mind?

What were the images in your mind?





### **Behaviors or Actions (CBT)**

#### What did you do? How did you react?

Isolating oneself from others

#### Crying

#### Checking your heart rate

Avoiding (specific people, social situations, flying, driving, leaving your house, doctor appointments)

Procrastination Reassurance Seeking Avoidance

Suppressing thoughts





**Body Sensations (CBT)** How did your body feel? Tired Cold Sweats Pounding heart Fast breathing, or breathing difficulty Stomach problems Insomnia Dizziness Pain





#### Polling Question #2 How does you respond to anxiety?

Isolating oneself from others

Crying

Avoiding people and/or situations

Suppressing thoughts

Fatigue

**Cold Sweats** 

Pounding heart

Fast breathing, or breathing difficulty

Stomach problems

Insomnia

Dizziness

Pain

Other





## Put It All Together (CBT)

Situation	Thought	Body Sensation	Behavior
Considering a new job or returning to school	"What if my MS symptoms increase and I can't keep up?"		
At a party	"My father looks too unsteady to carry that plate of food"		
Just finished yearly MRI, waiting for results	"What if they find something? I won't be able to cope if my MS symptoms progress"		

## Put It All Together (CBT)

Situation	Thought	Body Sensation	Behavior
Considering a new job or returning to school	"What if I have an exacerbation? What if my symptoms progress and I can't keep up?"	Pounding heart, insomnia	Avoid submitting an application
At a party	"My father looks too unsteady to carry that plate of food"	Pounding heart, breathing quickens	Run over and grab his plate
Just finished yearly MRI, waiting for results	"What if they find something? I won't be able to cope if my MS symptoms progress"	Insomnia, cold sweats, stomach pain	Check your medical record daily, call the clinic, read about MRI results and MS online





- **Schedule Worry Time**
- **Thought Stopping**







exercise!

Intervention -Body Sensations (CBT) Relaxation Techniques – Why?

#### Engages the Parasympathetic Nervous System

Slows the heart rate Lowers blood pressure Slows breathing rate Reduces muscle tension





# Reducing Anxiety: Progressive Muscle Relaxation





#### **Progressive Muscle Relaxation** Upper Lower Feet Stomach Legs Legs Upper Shoulders Chest Back Arms Lower Hands Neck Face Arms



www.pinterest.com



#### A Quick Exercise.....Huge Impact



http://www.dummies.com/how-to/content/reduce-stress-and-belly-fat-with-progressive-muscl.html





# Reducing Anxiety: Yoga & Breathing Exercises





# How Does Yoga Help?

- Decreases heart rate
- Decreases respiration rate
- Lowers blood
  pressure
- Improved heart rate variability





www.pintrest.com



# Yoga: Research to Real Life

- 3x/week for 8 weeks positively impacted depression, fatigue, and anxiety in people with MS
- Large review suggested that yoga had positive short term effect on mood in people with MS




## Yoga: Real Life





wikiHow

http://pure-yoga-dvd.com/yoga-art/yoga-for-health/10-yoga-poses-anxiety-stress/









http://pure-yoga-dvd.com/yoga-art/yoga-for-health/10-yoga-poses-anxiety-stress/











National Multiple Sclerosis Society

www.yogajournal.com

## **Deep Breathing:** Stress Reducer & Strength Increaser!

- Research demonstrates respiratory muscle training/intentional breathing may:
  - Reduce stress
  - Reduce fatigue
  - Improve strength of breathing muscles
  - Minimum of 3 days/week for 30 minute duration effective
- Effective exercise option for "MS Fatigue Days"
- Manage fatigue by increasing rest time between activities OR "sprinkle" through the day
  - 1-3 minutes





## **Respiratory Muscles**







## **Gasping Facts**

- Approximately 30-80% weakness of inspiratory and expiratory muscles in *ambulatory* individuals with MS
- Approximately 20-70% weakness of inspiratory and expiratory muscle strength in *non-ambulatory* individuals with MS



http://www.runningafterfifty.com/2012\_12\_12 \_archive.html





## **Deep Breathing: Practice**

#### Diaphragmatic Breathing

- 1. Sit comfortably with trunk supported and feet flat on the floor
- 2. Breathe in through your nose for a count of 3-4 seconds
  - Feel your belly fill with air
  - Try not to raise your chest
- 3. Breathe out through your mouth as if you were slowly blowing out a candle
  - Feel your belly flatten



http://callhealthylife.com/diaphragmatic-breathing-technique/





## Reducing Anxiety: Acceptance & Commitment Therapy





## Acceptance and Commitment Therapy (ACT)







## Acceptance and Commitment Therapy (ACT)

- Live in the present moment: *mindfulness*
- Acceptance: be flexible
  - Chinese Finger Trap
- Values:
  - Family, physical health, community, spirituality or faith, recreation, education, friendships, vocation, parenting, intimate relationships or romantic partner
- Thinking: having a thought vs. buying a thought





## Mindfulness: Notice 5 Things

- Pause
- Look around, and notice 5 things you can see
- Listen carefully, and notice five things you can hear
- Notice 5 things you can feel in contact with your body (e.g., a watch on your wrist)





## **Exercise:**

## something done or performed as a means of practice or training

www.dictionary.com





# How to start or stay consistent with exercise?!



http://blog.fibertown.com/2015/09/01/the-million-dollar-question-part-2/





## Other Strategies for Anxiety/Stress Management

- What works for you?
- What has not worked for you?



We Welcome Your Thoughts.....

http://veganstrategist.org/tag/slow-opinion/





## **Anxiety Action Plan**

#### • Anxiety:

• Example: Fear of falling limiting

#### • Action:

• Example: Physical Therapy

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## **Thank You!**



Meghan Beier Psychologist



Mandy Rohrig Physical Therapist

## **Questions/Comments**





## More Resources!

- Deep breathing http://www.cmhc.utexas.edu/stressrecess/Level\_Two/breathing.html
- Autogenic training
  <a href="http://www.webmd.com/balance/tc/autogenic-training-topic-overview">http://www.webmd.com/balance/tc/autogenic-training-topic-overview</a>
- Progressive muscle relaxation <u>http://www.cmhc.utexas.edu/stressrecess/Level\_Two/progressive.html</u>
- Visualization and guided imagery
  <u>http://services.unimelb.edu.au/counsel/resources/audio</u>

More Resources: <u>https://mind-bodyhealth.osu.edu/resources</u>

Make your own recording using a script





## **Can Do MS Resources**

**e NEWS** your best life update



Can Do Library



Find these resources at <u>www.MSCanDo.org.</u>



## **National MS Society Resources**



#### Exercise & Physical Activity with MS

<u>Mood Changes</u> <u>and MS:</u> <u>Managing</u> <u>Anxiety</u>



<u>Exercise as</u> <u>Part of</u> <u>Everyday</u> <u>Life</u>



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#### Health Insurance: What You Need To Know



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#### **September 13, 2016**

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