Biofeedback Matters



109 Croton Ave. 2nd Floor, Suite #240 Ossining, NY 10562 Web: www.biofeedbackinternational.com Phone: 877-669-6463/914-762-4646

Fax: 914-762-2281

E-mail: info@biofeedbackinternational.com

August 2018

Volume 6, Issue 2



Inside this issue:

•	Are we having enough fun?	1
•	Taking on Tension Headaches	2
•	Training Schedule	3
•	Let's Stay Connected	4



"All work and no play makes Jack a dull boy. " I think that was from the movie *One Flew*

Over the Cuckoo's Nest.

As we work hard to help others manage their stress, pain, insomnia, attention problems, and other symptoms it is important to remember to take care of ourselves. We need to eat right, exercise, visit healthcare professionals regularly, and practice relaxation and meditation.

An area that is sometimes forgotten is the importance of having fun. If we are not careful we can make ourselves so busy that we hardly remember what we like to do for fun let alone actually doing it. I started a practice that I picked up from a workshop that I attended. When we are starting a seminar and I have people



Are we having

enough fun?

introduce themselves on the first day, I also ask them to tell us what they like to do for fun. I get all kinds of interesting responses including dancing, singing, spending time outdoors, hiking, listening to music, playing video games, creating video games, and playing with their kids.

I usually say listening to music (especially live), spending time outdoors, traveling, and fishing. Although I do spend a fair amount of time doing some of the things I listed I have noticed that I have not done much fishing lately.

I could say that I have been too busy or haven't had the opportunity or come up with some other excuse. That really would not be totally true. If I make it enough of a priority I will do it. I really have enjoyed fishing in the past. It combines being outdoors, away from the everyday rush, crowds, and noise with the excitement of catching fish. I think of it as a different kind of mindfulness and meditation. You are taking in nature and at the same time focused on the various details required to catch fish.

I don't know what you do for fun but whatever it is make sure you are doing enough of it. It is very important for our health and wellbeing.

Next time we talk ask me when I am planning on going fishing.

Taking on Tension Headaches

Featured

Product:

Biograph Infiniti 360 Suite

Software

One Powerful New Software Suite for both **Peripheral Bio**feedback and Neurofeedback for **Biograph** Systems \$395



Use Coupon Code: Summer2018 to save \$40

Note the 360 Suite uses the MyoScan EMG sensor (\$295) instead of the

MyoScan-Pro. Please let us know if you also need a

MyoScan sensor when you place your order

Page 2

Tension headaches have one of the highest rated success rates of all of the common biofeedback

applications. They are also a very common

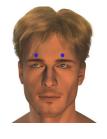
problem for a large number of people. Many people are seeking to reduce use of medications to treat symptoms even when they are effective due to the many potential side-effects.

Tension headaches may be triggered by excess tension in head, neck, and upper back muscles that may be chronic.

Let's take a look at the muscles that may be involved.

Shaffer 2006

I. Frontalis



This is one of the most common placements used in EMG biofeedback, not only for headaches but in general.

The dots on the forehead show where the active sensors would be placed. The ground sensor would be placed halfway between them. This placement will pick up muscle activity coming from the forehead, around the eyes, scalp, temples, jaw, and even the tongue and throat. This is what makes this one placement so useful. In order for the client to get

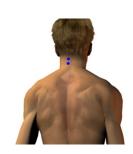
the readings low they have to relax all of those muscles. Sometimes working with this

> sensor placement is all that is needed. The client may have a habit of tensing his or her forehead as when they spend a lot of time being angry or frustrated. Others tend to tense the mus-

cles around their eyes perhaps because they have problems with their vision and need to see an eye doctor and get glasses.

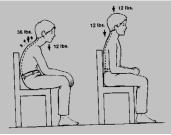
In cases where no excess tension is found in the head muscles keep looking. Next we look at the neck muscles.

2. Cervical Para spinals

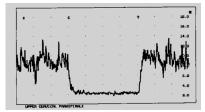


The excess tension could be located in muscles in the back of the neck. These muscles may be working too hard due to poor posture or too much time spent in unnatural head position due to poor work space arrangement or long hours using technology or equipment that causes unusual body positions. It can also be caused by working under stress. Think of people who spend hours working on computer or drive for a living. It is very easy for a person working on a keyboard or driving all day to lose track of how much tension they have in their neck

muscles. This usually involves holding the head too far forward which causes the neck muscles to work harder than they should to hold the head up. The following two graphs show differences in head position and what the resulting muscle activity looks like.



leffrey Cram 2001



With EMG feedback you can first show the client that they are holding excess tension in their neck muscles and then train them to correct their posture and head position to decrease the tension. They will watch the signals on the screen as they adjust their posture. A key is for them to notice the difference in how their body feels in the correct posture compared to the incorrect posture - when the muscles are tense versus when the muscles are relaxed. This is important so that they will maintain the correct posture most of the time and notice when they slip into the wrong posture.

The picture shows two active sensors on the neck. What is usually done is to place sensors on both the left and right sides of the neck with the active sensors arranged vertically down the neck just below the



Taking on Tension Headaches cont.

Volume 6, Issue 2

hairline with the ground off to



the side. Some disposable



sensors like the Triode made by Thought Technology and a similar one made by Multi Bio Sensors already have the

three electrodes arranged in a triangle pattern equally spaced on a single adhesive pad. These make it easy to do a narrow placement on the neck where the sensors are close together in a small space.

There is sensor placement that combines both the frontalis and cervical Para spinal muscles as shown in the following two pictures from front and side/ back angles. This placement is much less specific and is a way to work on having the client

relax both the facial and neck muscles at the same time using only one channel of EMG. The only way for the client to maintain

Peper-2008



a low reading is to relax both the facial and neck muscles at the same time.

3. Upper Trapezius

Finally we would look at the muscle activity in the upper back area. We can do this with either one or two channels of EMG. To use one channel we would be doing what is called a wide placement where one active sensor is on the left side of the upper back and the other active sensor is on the right side. The ground is placed equal distance in the center on the spine. This placement gives an average of the muscle tension on the left and right sides of the upper back. It doesn't tell you if the tension is coming from the left or right side, it just tells you that there is tension. The reading should increase if the client raises their left shoulder or if they raise their right shoulder, or if they raise both.

All of the muscle between the two active sensors contribute to the reading. The sensor placement that will give you more

> specificity is a two -channel EMG placement where you have all three sensors from one channel on the left side of the back and all three

sensors from the other channel on the right side of the back. These would be considered narrow sensor placements because the three sensors of each channel are close to each other. Both the single channel wide placement and the two-channel narrow placements are shown in the picture below.

If you are working with the single channel placement then the main goal is to reduce overall tension levels in the upper back and increase the clients awareness of when they are tensing so that they can release the tension quickly and not give it a chance to build up enough to trigger a headache.

If you are using the twochannel placement you can work on problem of asymmetry if it is present. This is when there is more tension on one side compared to the other. You can also look at cocontractions by having the person raise one shoulder to a specific amplitude while relaxing the other side to see if only the correct side contracts and the other side remains relaxed. If the side that should be relax-



ing also contracts then you can have them continue practicing until they can keep it relaxed and then work on the other side in the same way.

It can be very rewarding to help a person decrease the frequency and intensity of tension headaches and possibly reduce or eliminate medications. For more information on biofeedback for headaches consider attending our next EMG protocols workshop.



Biofeedback/ Neurofeedback Seminar Schedule BCIA Certification Biofeedback September 14-16 ,Waikiki, HI October 26-28, Hawthorne, NY January 17-19, 2019, Miami, FL Fees: \$1,195

BCIA Certification

Neurofeedback

Nov. San Juan, Puerto Rico Nov. 16-18, 2018 Hawthorne, NY January 21-23, 2019, Miami, FL Fees: \$995

Health Training Seminars is approved by the American Psychological Association to offer continuing education for psychologists and maintains responsibility for the program.

Please watch your email for announcements on webinars that we are offering.





Biofeedback Resources International

109 Croton Ave. 2nd Floor, Suite #240 Ossining, NY 10562 Web: www.biofeedbackinternational.com

Phone: 877-669-6463/914-762-4646 Fax: 914-762-2281 E-mail: info@biofeedbackinternational.com "We might think we are nurturing our garden, but of course it's our garden that is really nurturing us."

Jenny Uglow

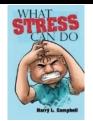
For even more instant updates and content from us on Social Media: @biofeedbackman on Twitter, and Biofeedback Resources Interna-

tional on Facebook and YouTube channel



Linked in





ORDER AT:

CREATESPACE.COM/3839220 OR

AMAZON.COM. CALL MY OFFICE FOR QUANTITY ORDERS.

Harry L. Campbell



With the fast paced world that we now live in it can become very easy to lose touch with each other. Social media sometimes makes us feel like we are connected but it is not the same as picking up the phone and calling someone or actually meeting in person. It has been said that words are only a small part of communication. Experiencing voice tones, facial expressions, and handshakes, pats on the shoulder, or maybe even hugs is so much richer than a text, email, or post that the rest of the social media world sees. I have had the chance to call and speak to some of you recently and it has really been refreshing and enjoyable. At times I hear about some negative things

Let's Stay Connected

that have happened in the lives of people that I know and feel bad to know that they were going through a painful time and I didn't even know. Sometimes just being able to talk about an issue with someone you know can help you feel better. Both parties can leave the conversation feeling better.

Another thing that I gain from meeting with clients is feedback. Your feedback is very important to me. It helps me to learn what is working for you and where you



may have challenges. With this information I can look at what I can do better and how I can help you and all of my other clients.

How is your equipment working for you? How could we improve your experience. How are your clients responding to biofeedback or neurofeedback? What kind of supplies do you prefer?

What are the next steps you are planning for your practice?

Do you need any additional support or training?

What population are you serving? How is business?

These are some of the questions I might want to ask you.

Besides that I may just want to say hello and find out how you are doing personally. I do care about all of you and want to spend more time communicating with you. I look forward to our next chat.