INDIANA PAIN ACADEMY newsletter

President:
Randall Lee Oliver, M.D.

Summer 2004

Welcome to the Summer issue of the Indiana Pain Academy newsletter. This issue will focus primarily on central sensitivity and migraines.

We thank you for your interest and welcome any discussion or comments. We also welcome any questions or concerns regarding pain and migraines and will print them in the next issue.

Central Sensitivity in Migraine

By: Randall L. Oliver, M.D.

The current thought is that migraine is primarily a hypersensitivity problem of central neurons. The brain is constantly in a flux or balance of excitatory and inhibitory neurotransmitters. Migraineurs are thought to have either an excess of excitatory or relative lack of inhibatory neurotransmitters. Therefore, the migraine is more easily triggered in these individuals.

Once triggered, a cascade of events further incite central sensitization and allodynia (pain with non-painful stimulation). The hereditary part of the migraine may be the degree of hypersensitivity, which translates to ease of migraine initiation.

Depression, anxiety, and stress increase central hypersensitivity, therefore allowing for easier migraine initiation. Another way of looking at this is that we all may have a migraine threshold, but some of us have a lower threshold.

Extraneous factors can lower, or perhaps, raise the threshold. Psycholgical issues, loss of sleep, weather changes, and other factors can lower the migraine threshold. Stress management, regular sleep, and exercise may increase the natural headache threshold. This scenario may explain why early treatment of migraine is more effective. The longer the migraine goes on the worse the hypersensitivity problem. There is also the question of whether having frequent poorly treated migraines may lead to increased overall headaches. This would lead to more headaches overall and those being less responsive to treatment.

If this is true, it would seem probable that more aggressive treatment of migraine early in life might help prevent progression of the migraine process. Conversely, non-treatment or incomplete migraine treatment may affect future migraines and not just the one poorly treated headache.

This same phenomenon occurs in chronic low back pain and other pain states. We know that some patients are predisposed to developing chronic pain, either by heredity, learned behavior, or psychological issues. Headaches commonly co-exist with other pain states. But with central sensitization at the root of both, it only makes sense.

TREAT ALL MIGRAINES

TREAT EARLY IN THE MIGRAINE

JUST FOR LAUGHS

Don't argue with an idiot; people watching may not be able to tell the difference.

Every time I walk into a singles bar I can hear Mom's wise words: "Don't pick that up! You don't know where it's been!"

Topiramate to gain FDA approval for preventative use

By: Randall L. Oliver, M.D.

Topiramate (Topamax), manufactured by Ortho-McNeil, will soon gain approval by the FDA for use as a preventative medication for migraines. It comes supplied in 25 and 100 mg. tablets. A study in the February 25, 2004 issue of the *Journal of the American Medical Association (JAMA)*, involved 468 patients in a 26-week randomized, double-blind, placebo-controlled study. Use of Topiramate resulted in a 50% decrease in headache frequency and severity, and a decrease in use of rescue medications. Onset begins in first month of use. It's best effect is seen at 100 mg. and 200 mg. doses.

ODD SIDE EFFECTS:

1.) Metabolic Acidosis
   * Benign lab finding usually
   * Unknown clinical significance
   * Severe in 2.2 patients out of 100,000
2.) Renal Calculus
   * Rare
   * Treatment is hydration
3.) Glaucoma, secondary to angle closure
   * Rare
   * Resolves within 24 hours of stopping medication
4.) Oligohydrosis/Hyperthermia in children
   * Rare

COMMON SIDE EFFECTS:

Paresthesia	50%
Fatigue	17%
Anorexia	16%
Weight Loss	13%
Memory	12%
Nausea	12%

Results:

* Decrease in total monthly migraine days
* Decrease in headache frequency
* Decrease in headache duration
* Decrease in rescue medications

	PLACEBO	50 MG.	100 MG.	200 MG.
Weight Loss:	+0.2%	-2.2%	-3.3%	-4.6%

	PLACEBO	50 MG.	100 MG.	200 MG.
Headache Frequency	from 5.6 to 4.5	5.4 to 4.1	5.8 to 3.5	5.1 to 3.0
# Patients with ≥50% Decrease in Headache Frequency	23%	39%	49%	47%

When starting prophylaxis, look at big picture

The standard of treating patients with three or more headaches per month is oversimplistic, since most migraines have four stages:

1.) Prodrome (may last 24-48 hours)
2.) Aura (may last <60 hours)
3.) Headache (may last 4-72 hours)
4.) Postdrome (may last 24 hours)

The patient's one migraine may involve 5-6 days of disability. Three headaches per month may therefore involve 15 days out of 30. On the other hand, if an individual migraine has no prodrome or aura, the headache responds within 1-2 hours to a triptan, and no postdrome occurs, then the patient essentially has approximately 3-6 hours of total disability per month. Therefore, the determination to prophylax should involve the length of each migraine, response to abortive treatment, and severity of each migraine. That is, the total amount of disability per month should be a factor in treating migraine patients with prophylaxis.

SELF-TALK AFFECTS PAIN STATE

By: Rebecca Oliver and Jim Schroeder, LCSW

"I'm useless." "I can't function anymore." "I'll never get better." How many of your chronic pain patients have uttered one or more of these self-defeating phrases? Chances are, a vast majority have, at one time or another, during a routine visit. This kind of negative self-talk has shown to contribute to the patient's feelings of defeat and despair.[1] When patients use the "can't" word, they are, in a sense, putting themselves on a "I'm disabled for life" road that only leads to more despair and depression.

It's been well-documented that a patient's emotions can affect and be affected by his or her body's processes.[1,3] For example, when a patient's pain flares up, he or she may have a decreased appetite or may act irritable. While focused on a pleasant activity, such as listening to music or watching a movie, the patient's pain slips out of his or her conscious thoughts. Focusing on the pain, depression, and anxiety can actually make the pain feel worse.[2]

By addressing and challenging negative self-talk, the chronic pain patient's experience of pain can be decreased by improving his or her perception of his or her ability to cope with pain. Positive self-talk, such as "I can deal with this," can decrease blood pressure and heart rate

MIGRAINE CASE STUDY

Case Study:

A [illegible]-year-old white female presents with a 5-year history of migraines, with increasing frequency. Clinical depression found on exam. Current stress is concern over passing the ISTEP test in order to graduate. She states that she has already failed twice. Her mother has told her that she is "stupid."

The patient was assessed for Attention Deficit Disorder and found to be positive. She was started on Strattera, along with Adderall for immediate effect. Upon returning four weeks later, the patient is smiling, happy, and reports getting A's on her last exams, as well as passing ISTEP. She relates that she is able to read uninterrupted now. Also, she has had only two headaches in the past month.

* Look for underlying triggers
* Treat the co-morbid conditions
* Look outside the box; find the "secret"
* Look for insomnia
* Look for psychological issues

Discussion:

Common co-morbid conditions to migraine are depression, anxiety, ADD, and insomnia. Ten percent of migraineurs are bipolar, compared to 3.3% of the general population. The influence of these conditions is both efferent and afferent, meaning migraine acutely causes sleep disturbance and depressive mood. But conversely, lack of sleep (or even too much sleep) can trigger migraines. Also, depression, anxiety, and stress trigger migraines and can make them to be less responsive to treatment.

This case study illustrates how treating the co-morbid conditions treated the migraine. Treating the ADD relieved the situational stress of school, thereby resolving the depression and insomnia, and thus, the migraine condition improved. This patient needed neither triptan nor standard migraine prophylactic medication.

It especially argues against indiscriminate use of opioid analgesics for headache treatment.

By: Randall L. Oliver, M.D.

SELF-TALK *(Continued from page 2)*

and [illegible]e the pain sufferer feelings of control and acceptance.[1] Health professionals must challenge patients to believe in themselves, which comes from accomplishments, achieving tasks, and supportive relationships.

Both the chronic pain patient and those of us who treat them know that we must accept that there will be different levels of functioning than the patient was once used to. Health professionals should not pretend to treat the patient who insists on remaining the victim for the rest of their life, as we don't improve their quality of life. We only help to blind them to the challenge that they would rather not face.

It's all about choices. The patient can choose to be negative and continue to be a victim of his or her pain, or choose to work on being positive and helping to improve his or her situation. By refusing to get sucked into the exaggerated, all-or-nothing negative self-talk, patients can take an active role in their health and well-being. Having the patient make a list of tasks that they can accomplish can be the difference between treating the patient and pleasing the victim.

The "pain is real, but suffering is what [the patient has] control of," says Bart Goldman, M.D. of HealthOne Occupational Medical Center in Lakewood, Colorado. "Unless the patient follows through with healthful lifestyle app[illegible]:hes, you usually only buy them short-term or partial relief" with injections, surgery, and medication.

Resources:
1.) Caudill, M.D. PhD., Margaret A. *Managing Pain Before it Manages You.* Revised Edition. New York: Guilford, 2002.
2.) Arthritis Foundation. <www.arthritis.org>.
3.) Goldman, M.D., Bart. <www.healthcentral.com>.

Hidden Emotional Pain = Physical Pain

By: Jim Schroeder, LCSW ***(Part 1 of 3)***

About twenty years ago, I was given a handout with 74 different diseases, labeled "Diseases Known to be Caused by or Made Worse by Stress." I was very doubtful of how much valid research had been properly pursued to validate this list. It included such conditions as digestive disorders, colitis, joint diseases, and palpitations. I was especially doubtful of backache and arthritis as being valid diseases related to stress. I was also very skeptical of the statement at the end: "Researchers tell us that 90% of doctor visits are related to stress."

Since that time, much more research has been completed on the "fight or flight" response and what happens when the human body experiences ongoing stress. This is the case with those who have been victimized by abuse, abandonment, and/or emotional neglect. We are learning more and more about the biomechanical reactions that affect us on a cellular level and on a hormonal level, as nerves transmit stress signals all over our body within fractions of a second.

(Parts 2 & 3 Continued in Future Issues...)

Want to Join?

NAME:_____

ADDRESS:_____

PHONE:_____ FAX:_____

E-MAIL:_____

ANNUAL MEMBERSHIP DUES: Physicians: $100/year; Others: $25/year

Fax this form to the IPA at: (812) 422-2421

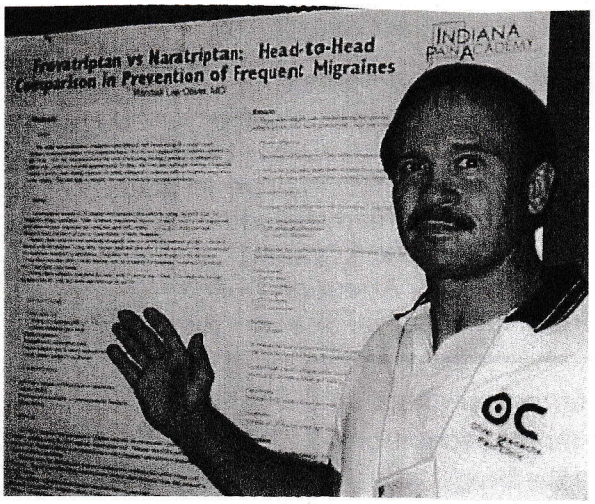
COMING EVENTS...

Indiana Pain Academy
Family Practice Symposium
November 13, 2004
Marriott Hotel
Evansville, Indiana

American Headache Society
Headache Symposium
November 12-14, 2004
Marriott Camelback Inn Resort & Spa
Scottsdale, Arizona

12th Congress of the IHS
"Believe in Headache Relief"
October 9-12, 2005
Kyoto International Conference Hall
Kyoto, Japan
www.ihc2005.com

American Academy of Pain Medicine
Annual Meeting
February 24-27, 2005
Wyndham Palm Springs & Convention Center
Palm Springs, California



Dr. Oliver presents a poster at the American Headache Society meeting in Vancouver, British Columbia June 10-13.

RESOURCES:

International Headache Society
www.i-h-s.org

National Headache Foundation
www.headaches.org

American Headache Society
www.ahsnet.org

American Academy of Pain Medic
www.painmed.org

INDIANA PAIN ACADEMY
P.O. Box 6271
Evansville, IN 47719