Complementary Medicine for The Pediatric Primary Care Office

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Faculty Disclosures

- In the past 12 months, Dr. Rosen has no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this CME activity. Dr. Culbert is the author of the “Be the Boss of Your Body™” book series published by Free Spirit Publishing.
- We do not intend to discuss an unapproved/investigative use of a commercial product/device in our presentation.

Overview – Dr. Tim Culbert

- Personal Introduction
- Biofeedback Basics
- Acupressure Point Stimulation
- Clinical Aromatherapy
- Building Self-Care “Toolkits” for Kids

Overview – Dr. Larry Rosen

- Personal Introduction
- Intro to Integrative Pediatrics
- Mind/Body Strategies- Clinical Hypnosis, Guided Imagery
- Natural Health Products
- Practice Management Issues
- Resources

Practical Approach to Ped CAM

- Not a comprehensive literature review – practical tips for the office setting
- Best current evidence (RCT’s and clinical experience: efficacy and safety)
- Children are not small adults
- First do no harm
- Consumer interest
- Pediatrician interest
- Finding a balance
**Considering The Evidence**

- Complementary Therapies in Pediatrics: A Legal Perspective

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**Biofeedback Basics**

- Use of electronic equipment to measure and feedback information about physiologic functions—which are then modulated in desirable direction
- Goal-balancing ANS (& CNS) activity
- Culturally Syntonic with Kids—“video-games for your body”
- Time and cost efficient treatment modality

**Biofeedback Modalities**

- Office Practice
  - Peripheral Temperature
  - Heart Rate Variability
  - Surface EMG
- Other Options
  - Skin Conductance
  - EEG
  - Capnometry (exhaled CO2)
  - Pneumography (resp movement)

**Biofeedback-Peripheral Temperature**

- Theory—the more relaxed you are (lowered symathetic nervous system activity), the more peripheral blood flow is enhanced, hands and feet warm up
- Evidence: HA (migraine and TT, RAP, IBS, Raynaud’s)
Biofeedback Peripheral Temperature II

- Practice: Discussion, Video, Demo

- Resources
  - Dermatherm Bands
    - Sham, Incorporated [www.sham.com](http://www.sham.com)
  - BioDots
    - [www.futurehealth.org](http://www.futurehealth.org)
    - [www.cliving.org](http://www.cliving.org)
  - Digital Temp Portable Units
    - [www.bio-medical.com](http://www.bio-medical.com)
    - [www.thoughttechnology.com](http://www.thoughttechnology.com)

Biofeedback-Heart Rate Variability I

- Theory: sophisticated analysis of heart rate patterns reflects ANS balance—ideal is "resonant frequency"—desirable high amplitude rolling wave pattern facilitates cognition as well

- Evidence: asthma, stress, depression, headaches, FxRAP, performance anxiety, sleep onset, IBS

Heart Rate Variability (HRV)

2.5 seconds of heart beat data

Biofeedback-Heart Rate Variability II

- Practice: Discussion, Video, Demo

- Resources
  - [www.heartmath.com](http://www.heartmath.com)
  - [www.heartmath.org](http://www.heartmath.org)
  - [www.emwave.com](http://www.emwave.com)
  - [www.aapb.org](http://www.aapb.org)
  - [www.stresseraser.com](http://www.stresseraser.com)
  - [www.bcia.org](http://www.bcia.org)
  - [www.stens-biofeedback.com](http://www.stens-biofeedback.com)

Biofeedback-Surface EMG I

- Theory: measure muscle activity (microvoltages) on surface of skin with sticky pads

- Evidence: Vocal cord dysfunction, asthma, headaches, rehabilitation, tight traps-neck muscles, belly breathing, pelvic floor dysfunction, incontinence
Biofeedback-Surface EMG II

- Practice: Discussion, Video, Demo

- Resources:
  - www.thoughttechnology.com

Biofeedback - PNG

- Pneumography-measuring and controlling abdominal and chest movements associated with breathing
- Evidence: hypertension, as part of HRV training, panic attacks, vocal cord dysfunction, performance anxiety, asthma
- Resource:
  - www.resperate.com

Biofeedback Gadgets

Show and Tell
Clinical Hypnosis and Guided Imagery

Definitions

- Hypnosis: An altered state of awareness usually but not always involving relaxation during which the participant can give himself/herself suggestions for desired changes to which he/she is more likely to respond that in their usual state of awareness.
- Guided Imagery: A technique that involves using the imagination and mental images to promote relaxation, changes in attitude or behavior, and encourages physical healing. Also known as visualization.

The Many Forms of Mind-Body Medicine

Children Enjoy Imaginary Play

- To teach self hypnosis for a specific purpose (such as reduction of pain or elimination of a habit) involves helping young children focus on their natural thinking styles.
- Kids move in and out of altered states and imaginary activities all the time.
Hypnosis & Children’s Sense of Mastery

- We emphasize that the child is in control.
- We offer to be the teacher or coach.
- We offer choices and options.
- We say that the child can use this skill when he or she chooses.
- We ask that parents not remind the child to practice self-hypnosis.

Misconceptions

- Patient is under control of the hypnotherapist
- Patient is unaware of surroundings and/or activities around him/her
- Patients defenses are impaired (there is improved access to subconscious material)
- Symptoms are masked
- Patient can be forced to do things they would not normally do

Contraindications to Hypnosis

- Treating symptom and ignoring underlying disorder
- It is used for fun or entertainment
- The problem is more effectively treated with another modality (e.g. medication)
- Patient is psychotic, acutely depressed
- Patient (child) does not want to engage in hypnosis (but parent wants them to)

Hypnosis Indications

- Headache (T and M)
- Abdominal pain syndromes: RAP and IBS
- Procedural Pain and Distress
- Tic Disorders
- Insomnia
- Anxiety, stress, panic
- Chronic Pain
- Burns
- Nausea/Vomiting
- Pruritis
- Enuresis
- Chronic Illness associated symptoms (i.e. chemotherapy)

Hypnosis: Chronic Pain

- Recurrent Abdominal Pain
- Headaches (tension, migraine)

Hypnosis Evidence I: Headache


"Children aged 6 to 12 years with classic migraine who had no previous specific treatment were randomized into propranolol or placebo groups for a 3-month period and then crossed over for 3 months. After this 6-month period, each child was taught self-hypnosis and used it for 3 months. Twenty-eight patients completed the entire study. The mean number of headaches per child for 3 months during the placebo period was 13.3 compared with 14.9 during the propranolol period; 5.8 during the self-hypnosis period. Statistical analysis showed a significant association between decrease in headache frequency and self-hypnosis training."
Hypnosis Evidence II: Headache

  - “This paper provides an updated review of the literature on the effectiveness of hypnosis in the treatment of headaches and migraines, concluding that it meets the clinical psychology research criteria for being a well-established and efficacious treatment and is virtually free of the side effects, risks of adverse reactions, and ongoing expense associated with medication treatments.”

Hypnosis: Case example

- 12 year-old boy with recurrent headaches, associated with nausea and vomiting – family is interested in nonmedication approach
  - Demonstration

Guided Imagery: Anxiety

- Procedural Anxiety
  - Vaccines
  - Blood tests
  - Throat cultures
  - Physical exam

MBM/Anxiety: Evidence I


MBM/Anxiety: Evidence II

  - “More formal methods of clinical hypnosis which combine a deep state of relaxation with focused imagery and suggestion have also been found to be effective in helping children and adolescents prepare for, cope with, and tolerate the pain and anxiety associated with medical procedures.”

Guided Imagery: Case example

- 17 y/o male coming in for pre-college physical, due for meningitis vaccine. 6’3”, 220 lbs, shaking and sweating, plastered against the far wall.
  - Demonstration
Training and Certification

- Society For Developmental and Behavioral Pediatrics Annual Pediatric Hypnosis Training
- American Society for Clinical Hypnosis
- Society for Clinical and Experimental Hypnosis
- International Society for Hypnosis
- Academy for Guided Imagery

Acupressure Point Stimulation

Acupressure Point Stimulation I

- Theory: 314 points arranged in energetic meridians-blockage and imbalance in “qi” or life force. Western Studies-release endorphins/enkephalins and impact ANS balance
- Evidence: sleep, pain, nausea, bedwetting, anxiety

Acupressure Point Stimulation II

- Practice: Discussion, Video, Demo
- Resources
  - www.omsmedical.com (supplies)
  - www.auricularacupuncturcollge.com
  - www.khtsystems.com (korean hand acu)
  - www.hmieducation.com (Helms course)
  - www.aaaom.org (training and certification)
  - www.acupressure.com (resources)

Acupressure Summary I

- Gadgets
  - Manual Stim
  - Accubeads, accupellets
  - Massage Pen
  - Sea-bands
  - Wooden accupoint stim tools
  - Pencil erasers and Fingers!
  - Accupoint E-Stim Gadgets
    - Relief bands
    - Clickers
    - Pen devices

Acupressure Summary II

- Anxiety
  - Ears plus CV 24.5, P6
- Pain
  - Li 4 on back of hand between thumb and index finger
- Nausea
  - P6 on wrist
- Bedwetting
  - “Nicturia” point on ventral surface of pinky, distal crease-middle
- Constipation — lateral to belly button
Natural Health Products

- Pre- and Probiotics
- Essential Fatty Acids
- Melatonin

Pre- and Probiotics

Pre/Probiotics: Practical Issues
- NHP issues in general
- Prenatal (atopy data)
- Infants (formulas)
- Antibiotic-Associated Diarrhea
- Infectious Diarrhea

Probiotics: Evidence I


Essential Fatty Acids (EFA’s)
### EFA’s in the News

#### EFA’s: Evidence I (URI/AOM)

#### EFA’s: Evidence II (N/D)

### EFA’s: Practical Issues
- What type?
- What dose?
- For which conditions?
- Palatability

### Melatonin

#### Melatonin: Evidence I (Sleep)
Melatonin: Evidence II (Sedation)


Melatonin: Practical Issues

- Type and dose
- Children with special needs
- Other uses (antioxidant/GI/Headache)?

Clinical Aromatherapy I

- Theory: Biochemical, Bioenergetic, and emotional/psychological effects of inhaled, ingested, topically applied oils which are steam-distilled form plants-Olfactory Nerve directly wired to Limbic System
- Evidence: minimal but good clinical experience. Sleep, Pain, nausea, fatigue, and anxiety

Clinical Aromatherapy II

- Practice: Discussion, Video, Demo
- Resources
  - www.wyndmerenaturals.com (product)
  - www.aromamd.net (products & training)
  - www.rjbuckle.com (training)
  - www.aromaceuticals.com (products)

Clinical Aromatherapy Summary

- Oils for Calming and Sleep
  - Lavender, sweet orange, sandalwood-inhale
- Oils for Nausea
  - Spearmint, fennel, peppermint, ginger-inhale
- Oils for Fatigue
  - Lemon, lime, peppermint-inhale
- Oils for Pain
  - Headaches-rosemary,
  - IBS-enteric coated peppermint oil PO
  - Sore muscles-lemongrass, black pepper-topical
Practice Management Issues

Coding & Billing for CAM
- Integrative Primary Care vs. Consultative Care
- For specific CAM procedures (biofeedback, acupressure/acupuncture)
- E&M time-based coding
  - Mind-Body Skills
  - Aromatherapy
  - Nutrition and NHP counseling

Building Self-Care “Toolkits” for Kids
- Discern-Control-Generalize Model
- Practicing Techniques - Home and School
  - Note cards with key elements, mini-break
- Preventive vs. Abortive Applications
  - Mind/Body: 2-3x/day, 5 minutes plus sx
  - Acupressure: once daily 1-2 hrs plus sx
  - Aromatherapy: as needed
- Combine - Make it Easy (e.g. sleep)
  - Inhale orange, push on CV 24.5, slow breathing
  - Make up small box or baggie for backpack, pockets

Comfort Kit for Kids & Families
- Best of currently available psychological/behavioral strategies
- Self-care design
- Booklet for kids with "exercises"
- Booklet for parents to be good coach
- Items to make it fun
- Trial of 100 kids (day surgery)
Self-Care Training Resources

- Books
  - Be the Boss of Your Body" Series
    - www.freespirit.com
  - “Ways to Wellness” Videos
- Music and Recorded Relaxation Exercises
  - www.therelaxationcompany.com
  - www.healthjourneys.com
  - www.Pzizz.com
- Home Computer Biofeedback Fun
  - www.wilddivine.com
  - www.heartmath.com

Web Resources

- AAP Section on CHIM
  - www.aap.org/sections/CHIM
  - Will post this presentation
- Integrative Pediatrics Council
  - www.integrativepeds.org
  - CAM bibliography
  - IPC Network
  - Pangea Conference

Text Resources

- Culbert & Olness, ed: Integrative Pediatrics
  - In press, March 2009 (Oxford University Press)
- Rosen & Riley, ed: Complementary and Alternative Medicine, Pediatric Clinics of North America (December 2007)
- Schwartz & Andrasik: Biofeedback: A Practitioners Guide
- Shannon: Handbook of Complementary and Alternative Therapies in Mental Health
- Schnaubelt: Medical Aromatherapy
- Reed Gach: Acupressure Potent Points

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