RECENT ARTICLES ON EMDR

Andrew M. Leeds, Ph.D.

This regular column appears in each quarterly issue of the EMDRIA Newsletter. It lists citations, abstracts, and preprint/reprint information (when available) on all EMDR related journal articles. The listings include peer reviewed research reports and case studies directly related to EMDR (whether favorable or not), including original studies, review articles and meta-analyses accepted for publication or that have appeared in the previous six months in scholarly journals. Authors and others aware of articles accepted for publication are invited to submit pre-press or reprint information. Listings in this column will exclude: published comments and most letters to the editor, non-peer reviewed articles, dissertations, and conference presentations, as well as books, book chapters, tapes, CDs, and videos. Please send submissions and corrections to: Aleeds@theLeeds.net.

Note: a comprehensive listing of all published journal articles related to EMDR from 1989 through 2005 can be found on David Baldwin's award winning web site at: http://www.trauma-pages.com/s/emdr-refs.php. Previous columns from 2005 to the present are available on the EMDRIA web site at: http://emdria.org/displaycommon.cfm?an=1&subarticlenbr=18

Recent Articles

Ahmad, A., & Sundelin-Wahlsten, V. (2007). Applying EMDR on children with PTSD. European Child & Adolescent Psychiatry. Sep 10; [Epub ahead of print]

Department of Child and Adolescent Psychiatry, Uppsala University Hospital, Uppsala, 751 85, Sweden, <abdulbaghi.ahmad@bupinst.uu.se>.

❖ *Abstract* ❖ OBJECTIVE: To find out child-adjusted protocol for eye movement desensitization and reprocessing (EMDR). METHODS: Child-adjusted modifications were made in the original adult-based protocol, and within-session measurements, when EMDR was used in a randomized controlled trial (RCT) on thirty-three 6-16-year-old children with post-traumatic stress disorder (PTSD). RESULTS: EMDR was applicable after certain modifications adjusted to the age and developmental level of the child. The average treatment effect size was largest on re-experiencing, and smallest on hyperarousal scale. The age of the child yielded no significant effects on the dependent variables in the study. CONCLUSION: A child-adjusted protocol for EMDR is suggested after being applied in a RCT for PTSD among traumatized and psychosocially exposed children.

Bonner, G., & McLaughlin, S. (2007). The psychological impact of aggression on nursing staff. British Journal of Nursing, 16(13), 810-814.

G. Bonner, Thames Valley University, Reading, UK.

❖ *Abstract* ❖ Aggression and violence towards nursing staff in UK health care is a growing problem. While the National Institute for Health and Clinical Excellence's (NICE, 2005a) guidelines 'The Short-Term Management of Disturbed/Violent Behaviour in In-Patient Psychiatric Setting and Emergency Department' offer a way forward in managing aggression for healthcare staff, the psychological impact of aggression remains an area of concern. Post-incident review has been identified as an approach to considering untoward incidents of aggression, yet post-incident support and interventions for staff experiencing the psychological effects of aggression remain inconsistent and curtailed in many areas. This article discusses the care of a nurse who experienced post-traumatic stress disorder as a result of aggression in the workplace. The process of assessment and treatment is presented with underpinning theories of trauma used to illuminate the discussion. Practical use of current recommended treatments of cognitive behavioural therapy and eye movement desensitization and reprocessing is offered as a method of addressing a growing problem in UK health care.

Carbone, D. J. (2007). Treatment of Gay Men for Post-Traumatic Stress Disorder Resulting from Social Ostracism and Ridicule: Cognitive Behavior Therapy and Eye Movement Desensitization and Reprocessing Approaches. Archives of Sexual Behavior, Published Online First. Accessed August 17, 2007 from http://www.springerlink.com/content/r6484k1706362413/

Dominic J. Carbone, Department of Social Sciences, The State University of New York-FIT, Seventh Avenue at 27th Street, B634, New York, NY, 10001, USA, <Dominic_Carbone@fitnyc.edu>.

❖ *Abstract* ❖ This report describes the clinical treatment of a sample of four gay men suffering from Post-Traumatic Stress Disorder (PTSD) attributed to their repeated experiences with peer ridicule and ostracism throughout childhood and adolescence, caused by their gender variant appearance and behavior. All of the men in the sample shared the following features: (1) a childhood history of ridicule and ostracism from both peers and adults focused on their gender variant presentation designed to elicit gender norm compliance; (2) a lack of social support networks to assist them in coping with the stress; (3) self-destructive coping responses that began in childhood and continued into adulthood in an attempt to lessen the experience of shame; and (4) symptoms of PTSD. A treatment model utilizing cognitive-behavioral therapy and eye movement desensitization and reprocessing was discussed.

Elofsson, U. O., von Scheele, B., Theorell, T., & Sondergaard, H. P. (in press). Physiological correlates of eye movement desensitization and reprocessing. Journal of Anxiety Disorders. doi:10.1016/j.janxdis.2007.05.012

Ulf O.E. Elofsson, Eksätravägen 128, SE-756 55 Uppsala, Sweden. Tel.: +46 18 462610; fax: +46 8 344143. <ulf.elofsson@pbmstressmedicine.com>

❖ *Abstract* ❖ Eye movement desensitization and reprocessing (EMDR) is an established treatment for post-traumatic stress disorder (PTSD). However, its working mechanism remains unclear. This study explored physiological correlates of eye movements during EMDR in relation to current hypotheses; distraction, conditioning, orienting response activation, and REM-like mechanisms. During EMDR therapy, fingertip temperature, heart rate, skin conductance, expiratory carbon dioxide level, and blood pulse oximeter oxygen saturation, were measured in male subjects with PTSD. The ratio between the low and high frequency components of the heart rate power spectrum (LF/HF) were computed as measures of autonomic balance. Respiratory rate was calculated from the carbon dioxide trace. Stimulation shifted the autonomic balance as indicated by decreases in heart rate, skin conductance and LF/HF-ratio, and an increased finger temperature. The breathing frequency and end-tidal carbon dioxide increased; oxygen saturation decreased during eye movements. In conclusion, eye movements during EMDR activate cholinergic and inhibit sympathetic systems. The reactivity has similarities with the pattern during REM-sleep.

Forbes, D., Creamer, M. C., Phelps, A. J., Couineau, A. L., Cooper, J. A., Bryant, R. A., et al. (2007). Treating adults with acute stress disorder and post-traumatic stress disorder in general practice: a clinical update. Medical Journal of Australia, 187(2), 120-123.

Full text available online at: http://www.mja.com.au/public/issues/187_02_160707/for10467_fm.html

David Forbes, Australian Centre for Posttraumatic Mental Health, University of Melbourne, Melbourne, VIC, Australia. <dforbes@unimelb.edu.au.>

❖ *Abstract* ❖ General practitioners have an important role to play in helping patients after exposure to severe psychological trauma. In the immediate aftermath of trauma, GPs should offer “psychological first aid”, which includes monitoring of the patient’s mental state, providing general emotional support and information, and encouraging the active use of social support networks, and self-care strategies. Drug treatments should be avoided as a preventive intervention after traumatic exposure; they may be used cautiously in cases of extreme distress that persists. Adults with acute stress disorder (ASD) and post-traumatic stress disorder (PTSD) should be provided with trauma-focused cognitive behaviour therapy (CBT). Eye movement desensitisation and reprocessing (EMDR) in addition to in-vivo exposure (confronting avoided situations, people or places in a graded and systematic manner) may also be provided for PTSD. Drug treatments should not normally replace trauma-focused psychological therapy as a first-line treatment for adults with PTSD. If medication is considered for treating PTSD in adults, selective serotonin reuptake inhibitor antidepressants are the first choice. Other new generation antidepressants and older tricyclic antidepressants should be considered as second-line pharmacological options. Monoamine oxidase inhibitors may be considered by mental health specialists for use in people with treatment-resistant symptoms.

Ladd, G. (2007). Treatment of psychological injury after a scuba-diving fatality. Diving and Hyperbaric Medicine, 37(1), 36-39.

Gary Ladd, 330-1200 Burrard Street, Vancouver BC, Canada V6Z 2C7, +1-604-682-5467, <Gary@PsychoDiver.com>

❖ *Abstract* ❖ After the death of a student during an ocean scuba training dive, the student's diving instructor was suffering from Acute Stress Disorder, a post-traumatic stress reaction. The treatment of the instructor's distress using a combination of two recognized trauma therapies: Eye movement desensitization and reprocessing (EMDR) and cognitive-behaviour therapy (CBT) is described. Improvement was noted after four treatment sessions. The instructor reported further improvement at a two-month follow-up and the positive effects were maintained nineteen months later.

Lee, C. W., & Drummond, P. D. (in press). Effects of eye movement versus therapist instructions on the processing of distressing memories. Journal of Anxiety Disorders. http://dx.doi.org/10.1016/j.janxdis.2007.08.007

Christopher W. Lee, School of Psychology, Murdoch University, South Street, Murdoch, WAU, Australia, 6150, chlee@murdoch.edu.au

❖ *Abstract* ❖ The effectiveness of components of eye movement desensitization and reprocessing (EMDR) was tested by randomly assigning 48 participants to either an eye movement or an eye stationary condition and to one of two types of therapist instructions (reliving or distancing). Participants were university students (mean age 23) who were asked to recall a personal distressing memory with measures of distress and vividness taken before and after treatment, and at follow-up. There was no significant effect of therapist's instruction on the outcome measures. There was a significant reduction in distress for eye movement at post-treatment and at follow-up but overall no significant reduction in vividness. Post hoc analysis revealed a significant reduction in vividness only for the eye movement and distancing instruction condition. The results were consistent with other evidence that the mechanism of change in EMDR is not the same as traditional exposure.

Montefiore, D., Mallet, L., Levy, R., Allilaire, J. F., & Pelissolo, A. (2007). [Pseudo-dementia conversion and post-traumatic stress disorder]. Encephale, 33(3 Pt 1), 352-355.

D. Montefiore, Service de Psychiatrie Adulte et CNRS UMR 7593, Hopital de la Pitie-Salpetriere (AP-HP), 47-83, boulevard de l'Hopital, 75013 Paris, France.

❖ *Abstract* ❖ BACKGROUND: Post-traumatic stress disorder (PTSD) is often associated with other psychiatric syndromes. However, studies exploring conversion and PTSD comorbidity are scarce. CASE-REPORT: This paper reports the case of a 45 year-old patient without medical or psychiatric history. In 2003, he suddenly started suffering from amnesia and symptoms of delirium: he was at his office with a cup of coffee but he did not remember why. Aphasia, trembling, behavioural disorders appeared over the next hours and days. Numerous neurological examinations and laboratory tests (including cerebral imagery) were performed without evidence of any physical disease. Three psychiatric examinations were also negative, even if a possible psychogenic origin was hypothesized. Neurological or psychiatric diagnoses were discussed but without definitive conclusion. One year later, the symptoms were unchanged until the patient watched a movie ("Mystic River") that described the story of a man with sexual abuse in childhood. He suddenly remembered that he lived the same experience when he was 8 years old. At the end of the movie, his wife surprisingly noticed that he was walking and speaking normally. All the neurological symptoms disappeared. Unfortunately, symptoms of a severe PTSD appeared, as well as a major depressive disorder. The patient and his parents remembered that he had been more irritable, depressed and anxious at school and during the night, between 8 and 13 years of age, with a possible PTSD during this period. He always refused to talk with his parents about the traumatic event. When he was 13, the family moved house, the patient seemed to forget everything and the symptoms disappeared. About thirty years later, the symptoms were similar with the reexperien of the traumatic event through unwanted recollections, distressing images, nightmares, or flashbacks. He had also symptoms of hyperarousal with physiological manifestations, such as irritability, insomnia, impaired concentration, hypervigilance, and increased startle reactions. Hospitalisation became necessary because of a severe depressive disorder with suicidal ideation and suicidal attempt by hanging. After two failed treatments with SSRI antidepressants, the administration of clomipramine (200 mg/d) and a combined therapy with Eyes Movement Desensitization and Reprocessing (EMDR) led to a significant improvement of PTSD and depression symptoms. DISCUSSION: Even if PTSD and conversion may share common dissociative mechanisms, the links between both syndromes have not yet been sufficiently explored. Our clinical case raises specifically the question of the initial manifestations of pseudo-dementia (why this type of symptoms, and why at this particular moment of his life, without any targeting events). Moreover, the case of this patient is particularly interesting because of the very long amnesia period between the traumatic event and the onset of PTSD. CONCLUSION: The different phases of this case warrant more precise exploration of the links between PTSD and conversion, with clinical, epidemiological and cerebral imagery perspectives.

Pagani, M., Hogberg, G., Salmaso, D., Nardo, D., Sundin, O., Jonsson, C., et al. (2007). Effects of EMDR psychotherapy on 99mTc-HMPAO distribution in occupation-related post-traumatic stress disorder. Nuclear medicine communications, 28(10), 757-765.

M. Pagani, Section of Nuclear Medicine and Department of Radiology, Karolinska University Hospital, Stockholm, Sweden

❖ *Abstract* ❖ BACKGROUND: Post-traumatic stress disorder (PTSD) is a derangement of mood control with involuntary, emotionally fraught recollections that may follow deep psychological trauma in susceptible individuals. This condition is treated with pharmacological and/or cognitive therapies as well as psychotherapy with eye movement desensitization and reprocessing (EMDR). However, only a very limited number of studies have been published dealing with work-related PTSD, and investigations on the effect of treatment on cerebral blood flow represent an even smaller number. AIM: To investigate the short-term outcome of occupation-related PTSD after EMDR therapy by Tc-HMPAO SPECT. METHOD: Fifteen patients, either train drivers suffering from PTSD after having been unintentionally responsible for a person-under-train accident or employees assaulted in the course of duty, were recruited for the study. Tc-HMPAO SPECT was performed on these patients both before and after EMDR therapy while they listened to a script portraying the traumatic event. Tracer distribution analysis was then carried out at volume of interest (VOI) level using a three-dimensional standardized brain atlas and at voxel level by SPM. The CBF data of the 15 patients were compared before and after treatment as well as with those of a group of 27 controls who had been exposed to the same psychological traumas without developing PTSD. RESULTS: At VOI analysis significant CBF distribution differences were found between controls and patients before and after treatment (P=0.023 and P=0.0039, respectively). Eleven of the 15 patients responded to treatment, i.e., following EMDR they no longer fulfilled the DSM-IV criteria for PTSD. When comparing only the eleven responders with the controls, the significant group difference found before EMDR (P=0.019) disappeared after treatment. Responders and non-responders showed after therapy significant regional differences in frontal, parieto-occipital and visual cortex and in hippocampus. SPM analysis showed significant uptake differences between patients and controls in the orbitofrontal cortex (Brodmann 11) and the temporal pole (Brodmann 38) both before and after treatment. A significant tracer distribution difference present before treatment in the uncus (Brodmann 36) disappeared after treatment, while a significant difference appeared in the lateral temporal lobe (Brodmann 21). CONCLUSION: Significant Tc-HMPAO uptake regional differences were found, mainly in the peri-limbic cortex, between PTSD patients and controls exposed to trauma but not developing PTSD. Tracer uptake differences between responders and patients not responding to EMDR were found after treatment suggesting a trend towards normalization of tracer distribution after successful therapy. These findings in occupational related PTSD are consistent with previously described effects of psychotherapy on anxiety disorders.

Wheeler, K. (2007). Psychotherapeutic strategies for healing trauma. Perspectives in Psychiatric Care, 43(3), 132-141.

Kate Wheeler, PhD, APRN, Fairfield University School of Nursing in Fairfield, CT, USA. <kwheeler@mail.fairfield.edu>

❖ *Abstract* ❖ PURPOSE: The Adaptive Information Processing Model (AIP), originally developed by Shapiro (2001), provides a model for understanding how trauma affects the brain and how healing occurs. CONCLUSIONS: The effects of trauma are thought to be much broader than the diagnosis of PTSD and overlap with many other diagnostic categories. Recent physiological research supports the complexity of neurobiological responses to childhood stress and trauma. PRACTICE IMPLICATIONS: The Treatment Hierarchy, AIP model, and evidence-based treatment framework presented here provide the context and a compass for holistic PMH-APRN practice for working with traumatized patients.

Wilensky, M. (2006). Eye Movement Desensitization and Reprocessing (EMDR) as a Treatment for Phantom Limb Pain. Journal of Brief Therapy, 5(1), 31-44.

Marshall Wilensky, Ph.D., British Columbia School of Professional Psychology 406-1168 Hamilton Street, Vancouver, British Columbia, Canada V6B 2S2 <wilensky@interchange.ubc.ca>

❖ *Abstract* ❖ Five consecutive cases of phantom limb pain were treated with EMDR. The time since the amputation ranged from one week to three years. Four of the five clients completed the prescribed treatment and reported that pain was completely eliminated, or reduced to a negligible level. The one client who stopped treatment chose to do so after reducing his pain by one half. The standard EMDR treatment protocol was used to target the accident that caused the amputation and other related events. The five cases are described in detail. The treatment and theoretical implications are explored and recommendations are made for future research.