

Visual Thought Stopping for Pain Stress and Depression

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***A New Technique for Pain Control,
Depression & Stress Reduction:
Afterimage Visual Perception Thought Stopping***

AAIM Florida Convention Questionnaire for Duke Medical School CMEU

Former PhD Candidate Robert J. Walsh

Discovered in 1998, the afterimage technique evolved following Dr Costello's diagnosis of an inoperable massive oesophageal adenocarcinoma. He was told the chance of recovery from this biopsy-proven undifferentiated tumour was 2.5% and he had 12-18 month's life expectancy "at the outer limits" or at best, if an aoesophagectomy was possible, 3-5 years only. This technique succeeded in excruciating pain control and stress reduction on discarding prescribed 24hr slow release morphine in the first week of treatment.

The afterimage is achieved by focusing on a specific fluorescent stimulus. Patients then close their eyes to see a beautiful violet afterimage. This trance-induced state is at the shortest visual wavelength of 400 nanometers. Afterimage duration time increased with daily entrainment through physiological conditioning.

Positive results were achieved in clinical practice with 70 traumatised patients and victims of crime suffering acute/chronic pain and adrenergic stress. The presenter explains his additional measurements in research at Swinburne Graduate School of Integrative Medicine, Australia. This replicates the original study (Costello, 1999) with pre-post salivary cortisol analysis used frequently by Drs Sali & Vitetta at Swinburne; blood pressure; Coronary Age Assessment (Cassel, 1985, 1987; Costello, 1987); and Wahler Physical Symptoms Inventory (Wahler, 1983).

Noteworthy research confirms brainwave activity "follows" repetitive light and sound frequencies (Cox, Shealy, Cady & Liss, 1996). The 400nm-afterimage frequency induces low brainwaves between 3-12Hz. At this low level, an altered state of consciousness trance is attained. The optic nerve relays messages from the retina to two thirds of the brain.

In the original study, pre-post computerised biofeedback showed greatly reduced EMG, EDA and pulse rate with increased peripheral body temperature. Also the Type A Lifestyle Analysis Profile (Gilley 1976; Gilley & Uhlig, 1985; Cassel, 1985,1990; Cassel & Costello, 1990, 1991) revealed psychological personality changes.

Remarkable pre-post reductions were scored for depression, anxiety, loneliness, negative attitude and overall stress load. Improved scores were evident for self-esteem, satisfaction, involvement, assertiveness and ego-strength. Daily visual analogues and diaries recorded reduced pain and adrenergic stress with increased quality and duration of sleep.

Learning Objectives

1. Application of the afterimage technique to induce an altered state of consciousness, trance at the 3-12 Hz brainwave range and how the technique is entrained/ conditioned.
2. Understanding results from the original study relating to pre-post changes in Computerised Biofeedback, Lifestyle Analysis Profile and daily visual analogue recorded levels of adrenergic stress, pain and sleep quality/duration.
3. To understand the pre-post assessments used in the original study (Computerised Biofeedback, Lifestyle Analysis Profile and Visual Analogue recordings) as well as Salivary Cortisol Analysis, Coronary Age Assessment and Whaler Physical Symptoms Inventory.
4. To learn about other potential applications of the afterimage technique.

Multiple Choice Questions

- 1. What additional assessments will be included in the research conducted by the presenter that were not in the original study?**
 - (a) Salivary Cortisol Analysis, Computerised Biofeedback and Visual Analogue recordings of pain, stress and sleep quality.
 - (b) No additional assessments apart from electrolytic diffusion.
 - (c) Coronary Age Assessment, Whaler Physical Symptoms Inventory and Salivary Cortisol Analysis.
 - (d) Lifestyle Analysis Profile, Coronary Age Assessment and Computerised Biofeedback.
- 2. What does the Coronary Age Assessment measure?**
 - (a) 14 heart risk factors used to estimate the coronary age of an individual, taken from the Computerised Biofeedback and Lifestyle Analysis Profile scores.
 - (b) 23 heart risk factors used to estimate the coronary age of an individual, including Computerised Biofeedback, Lifestyle Analysis Profile, weight, exercise, blood pressure, pulse, peripheral body temperature, nutrition questionnaire and previous heart conditions.
 - (c) Whether the individual has had previous history of angina or heart attacks.
 - (d) 9 heart risk factors used to estimate the coronary age of an individual taken from weight, exercise, blood pressure, pulse, peripheral body temperature, nutrition questionnaire and previous heart conditions.
- 3. What information will be gathered by the pre-post saliva analysis in the presenters' current research?**
 - (a) The level of pain experienced.
 - (b) Changes in cortisol levels.
 - (c) Levels of depression.
 - (d) Changes in cortisone levels

4. The afterimage technique is achieved by:

- (a) Focusing on a fluorescent yellow circle before closing the eyes to see a violet afterimage.
- (b) Looking at a violet fluorescent circle with the eyes open.
- (c) Opening and closing of the eyes repeatedly while looking at a fluorescent yellow image.
- (d) Focusing on a fluorescent blue circle before closing the eyes to see a green afterimage.

5. How is the duration time of the "afterimage" increased?

- (a) Staring at the fluorescent stimuli for a longer duration.
- (b) Closing the eyes for a longer time.
- (c) Through physiological conditioning with consistent daily use.
- (d) Using the technique once a week.

6. The first traditionally recorded afterimage experiments were completed by:

- (a) Ancient Aztec and Egyptian adept's.
- (b) Albert Einstein
- (c) The CSIRO using a GADDS X-Ray microdiffractometer.
- (d) Sir Isaac Newton

7. In the original study (Costello, 1999), what was revealed in the pre-post administration of the Lifestyle Analysis Profile?

- (a) Increased scores for depression, anxiety, loneliness, negative attitude and overall stress load. Reduced self-esteem, satisfaction, involvement, assertiveness and ego-strength.
- (b) Depression, anxiety, self-esteem, satisfaction and overall stress load reductions. Higher levels of loneliness, negative attitude, involvement, assertiveness and ego-strength.
- (c) No discernible statistical T score changes in the pre-post test scores.
- (d) Reductions in depression, anxiety, loneliness, negative attitude and overall stress load. Improved scores for self-esteem, satisfaction, involvement, assertiveness and ego-strength.

8. In the original study (Costello, 1999), what did pre-post computerised biofeedback results show?

- (a) Reduced EMG, EDA, and pulse rate and increased peripheral body temperature.
- (b) EMG, EDA, and pulse rate increases and peripheral body temperature reduced.
- (c) Increased EMG and peripheral body temperature and reduced EDA and pulse rate.
- (d) Reduced EMG, and pulse rate and increased EDA and peripheral body temperature.

9. In the original study (Costello, 1999), what did the daily self-reported visual analogues and diaries reveal?

- (a) Reduced adrenergic stress, and increased pain perception and quality/duration of sleep.
- (b) Reduced adrenergic stress and pain perception and increased quality/duration of sleep.
- (c) Slightly discernible changes over the month of daily afterimage use.
- (d) Adrenergic stress and pain perception increased and quality/duration of sleep reduced.

10. What unexpected anecdotal results were found in the original study?

- (a) The technique also assisted patients suffering from schizophrenia
- (b) Patients found themselves falling asleep all the time.
- (c) A number of patients reported lucid state dreaming.
- (d) Patients felt angry after using the technique.

ANSWERS FOR MULTIPLE CHOICE QUESTIONS.

1(c) 2(b) 3(b) 4(a) 5(c) 6(d) 7(d) 8(a) 9(b) 10(c)