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SIXTH INTERNATIONAL MONTREUX CONGRESS ON STRESS
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State-of-the-Art Presentations on Psychosocial Aspects of Coronary Heart Disease, Stress and Dermatologic Disorders, Stress and Neural Traffic Between the Brain, Heart and Gut, Post-Traumatic Stress Disorder Featuring Recent Experiences in Bosnia, Kuwait, Somalia and the U.S., Stress and Pain, Subtle Energy Stress Medicine (Aromatherapy, Music, Touch, Electromagnetic Fields). Plenary Session on Job Stress and Stress Management Strategies, Entertaining After Dinner Presentations. Registration Strictly Limited. Contact Jo Ann Ogawa, The American Institute of Stress, 124 Park Ave., Yonkers, NY 10703. Phone (914) 963-1200, Fax (914) 965-6267 or (914) 377-7398.

MORE ON STRESS AND THE THYROID

The possible role of stress as a precipitating factor in Graves' disease was noted in Parry's initial report, and subsequently by Graves, Basedow, and others. By the end of the last century, Graves' disease was generally acknowledged as resulting from "prolonged worry as well as to sudden shock", and a review of the literature fifty years ago concluded that "emotional stresses of considerable severity precede the onset of hyperthyroidism in over 90 percent of the cases."

"Stress thyrotoxicosis" with exophthalmus and typical histologic changes of Graves' disease has been observed in wild rabbits within hours following the stress of vigorous pursuit, and in humans following a sudden fright. (*Schreckbasedow*).

Despite these and other compelling anecdotal reports, not everyone subscribes to the stress-Graves' disease hypothesis. Like the chicken and the egg, the question can be raised as to which came first. Increased anxiety and/or hyperreactivity to stressors might be an early manifestation of hyperthyroidism, preceding other symptomatology or clinical diagnosis by months. Attempts to resolve this issue usually focus on examining the correlation between the magnitude of antecedent life change events and Graves' disease.

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ALSO INCLUDED IN THIS ISSUE

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Paul J. Rosch, M.D., F.A.C.P.
Editor-in-Chief

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Kriegbasedow And Stress

An increase in Graves' disease has been reported during every major war (*kriegbasedow*) since the Franco Prussian. During World War II, hospital admissions for Graves' disease in occupied Scandinavian countries increased five to sixfold, and promptly fell to normal levels following liberation. However, some epidemiologic surveys have had contradictory findings. Critics on both sides of the controversy complain that non supportive studies are inaccurate because of inadequate assessment methods such as deficiencies in data collection due to bias recall, not balancing control groups for relevant sociodemographic variables, etc. Thus, the opening sentence of a recent review was "The role of stressful life events in the onset of Graves' disease is controversial", while another concluded with "the safest answer to the question of whether stress causes Graves' disease is: perhaps".

The major stumbling block is the difficulty in defining, much less quantifying "stress" in objective terms that scientists can agree on. Large scale epidemiologic surveys based on the number and magnitude of life change events in the 12 months prior to diagnosis or onset of symptoms are not likely to settle the issue either way for several reasons. One of the most obvious is the inability to control for pertinent modulating influences such as social support, or individual differences in personality attributes and coping skills. Death of a spouse is generally acknowledged to be the most stressful life change event, and the termination of a union characterized by mutual love and caring for forty or fifty years could obviously be extremely distressful for the survivor. However, its severity would be tempered by factors such as the degree of available social support, and the resulting changes in quality of life. In contrast, the death of an abusive, wife beating, derelict husband, might prove a very welcome relief for his widow. Such important distinctions would not be recognized in a large scale survey that viewed these two individuals as statistically identical.

A Biopsychosocial View

In certain respects, this predicament is somewhat reminiscent of the present polemic concerning the relationship between Type A behavior and coronary mortality, and there may be a lesson to learn from this. In one study of 150 male cardiac patients who were followed for ten years, Type A Behavior scores alone did not forecast the likelihood of survival. However, when combined with ratings of lack of cohesive social integration and depressive psychological responses, the ability to predict mortality increased considerably. The point here is that measuring personality characteristics alone may fail to provide meaningful information as to what the consequences of that behavior are apt to be. Similarly, the significance of life change events or other stressors cannot be evaluated without considering other moderating factors. What is required in all investigations into the role of stress in health and illness, is an approach that acknowledges the important interactions between individual psychological and behavioral characteristics, the social milieu, psychophysiologic responses, and quality of life. In some instances, stress may simply serve

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to pull the trigger of a loaded gun.

Although the cause or causes of Graves' disease are unknown, there is considerable evidence that it results from, or is associated with a disturbance in immune system function. The significant effects of stress on immune system competency are complex, and new discoveries in the flourishing field of psychoneuroimmunology may help to delineate its role in Graves' disease. Until then, prospective studies that utilize a biopsychosocial perspective and approach would likely shed more light than additional heat on this debate.

Paul J. Rosch, M.D., Editor

Depression Over Heart Attack Could Be Fatal

As noted previously, a Mayo Clinic study revealed that patients who suffered severe psychological distress following a coronary event were much more likely to require re-admission for cardiac problems. A new report now confirms that patients who experience a major depression following a heart attack are also at increased risk of dying within the next six months. In a study of almost 200 patients who suffered an acute myocardial infarction, 31 were diagnosed as being depressed. Seventeen per cent of these died during follow-up, compared to only 3% of the non depressed group. The explanation for this is not clear. One suggestion is that depressed patients might not take their medications regularly, or have problems adhering to a diet or giving up cigarettes. It is also possible that depressed patients have disturbances in autonomic nervous system function that make them more vulnerable to fatal disturbances in heart rhythm. About one in five heart attack patients experience some degree of significant depression during hospitalization, but this is usually temporary. In those who have persistent signs and symptoms of depression, antidepressants and supportive psychotherapy could prove life saving.

Medical Tribune-June 24, 1993

Monitoring "White Coat" Hypertension

Everyone's blood pressure goes up under stress, or even while simply speaking. Initial office measurements are invariably much higher than those obtained 10 or 15 minutes later because of anticipatory stress. Unfortunately, physicians pressed for time may neglect to wait a sufficient length of time to insure that subjects are relaxed before obtaining repeat readings. As a result, it is believed that millions of patients incorrectly diagnosed as having fixed hypertension may be taking needless medications for the rest of their lives. Temporary elevation of blood pressure in response to stress, or so called "white coat" hypertension, is generally viewed as an exaggerated normal response. Even though readings may be alarmingly high, there is no proof that this predisposes to subsequent permanent hypertension or complications such as stroke.

In one report, "white coat" hypertension was present in almost 60% of patients with elevated blood pressures being followed in a clinic. Careful follow-up revealed that these stress-related hypertensives did appear to be at increased risk for subsequent coronary heart disease, and also had higher cholesterol, triglyceride and insulin levels than controls. While there is no evidence that they require antihypertensive drugs, they should be followed closely and encouraged to pursue non pharmacologic blood pressure reduction approaches.

Home blood pressure monitoring may be useful in identifying subjects with "white-coat" hypertension. The technique can be readily learned by relatives and there are also a variety of self-use automated instruments that are simple, sensitive and accurate. Deciding whether such patients require any medication and which one to begin with can be tricky. Instituting drug therapy is frequently based on finding repeated elevated office blood pressure measurements, regardless of readings obtained elsewhere. However, home blood pressure monitoring is quite useful for evaluating responses to treatment. Not enough data has yet been accu-

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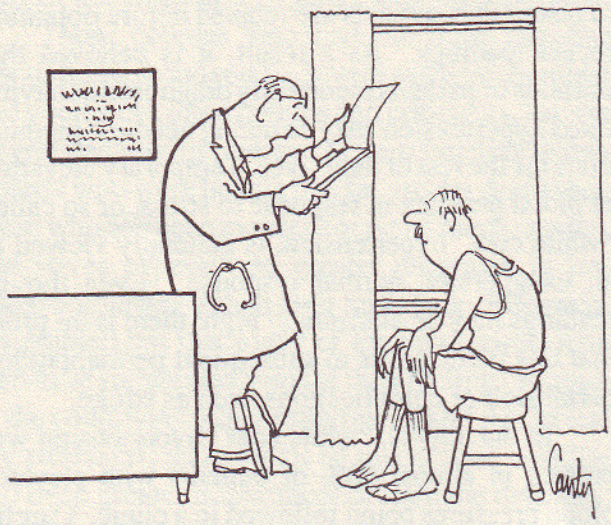
mulated to make conclusions with respect to significant morbidity and/or mortality differences in treated versus non treated patients with stress induced hypertension. Even if blood pressures are found to be consistently elevated, weight loss, dietary alterations, exercise, and stress reduction strategies should be considered as the first line of treatment before resorting to drugs.

J. Hypertens Suppl.-December, 1991



"Oh, I'm sorry, that was the good news."

Music Therapy For Heart Attacks?

As noted previously, the degree of emotional distress accompanying a heart attack may predict the likelihood of subsequent hosptal re-admission and cardiac mortality. As a consequence, a variety of strategies have been employed to reduce stress levels in acute heart attack victims. Stress associated with admission to a coronary care unit may be related to the severity and/or abrupt onset of symptoms, the unknown effects of hospitalization on the individual, family, job, financial status, and other concerns about future well being. This may be manifested by varying degrees of anxiety, depression, fear, or combinations of the above. Stress reduction approaches to reduce such complaints have included educational counseling, meditative and autogenic training exercises, but music therapy may be the most cost effective.

A recent study examined the effects of relaxing music on increased anxiety levels in 40 patients suffering from acute myocardial infarction. They were randomly assigned to an experimental group who listened to relaxing music, and a control group with conventional treatment. Physiologic functions were monitored and measurements were made of state and trait anxiety. A statistically significant reduction in heart rate, respiratory rate and state anxiety scores were demonstrated in the music therapy group, but not in controls. In other hospital settings, music has been shown to reduce postoperative pain and anxiety.

Brit J. Nurs.-June, 1992
Clin. Nurs.-Summer, 1992

Who is there, that in logical words, can express the effect that music has on us? A kind of inarticulate unfathomable speech, which leads us to the edge of the Infinite, and lets us for a moment gaze into that.

Thomas Carlyle

Stress Reduction Effects of Touching

Prior research has demonstrated that physical touch can lower elevated heart rates in intensive care unit patients, even when they are comatose. Therapeutic touch is being utilized increasingly to allay anxiety, and in some instances, it would appear that this does not require actual physical contact, and involves the sensation or transfer of subtle energies even when the therapist's hand is a few inches away from the patient. Massage therapy is being increasingly employed as a stress reduction strategy, and may be particularly effective for newborns, especially those who are premature. Massaged babies gain weight as much as 50% faster than unmassaged controls, and "are less likely to cry one minute, then fall asleep the next... and better able to calm and console themselves." They're also more active, alert, responsive, aware of their surroundings, and resistant to noise stress. As one authority commented, "It's amazing how much information is communicable in a touch. Every other sense has an organ you can focus on, but touch is everywhere".

American Health-October, 1993

The Music Of Type A Behavior

It has been suggested that patients with disturbances in heart rhythm may also suffer from a deficiency in perceiving and producing musical rhythms. In one study, 313 patients with a history of unexplained cardiac arrhythmias were asked to mark on a sheet of paper rhythmic patterns played for them on a tape recorder, and also to tap synchronously with repeating patterns heard on the tape. Their responses were analyzed and compared to those from 31 carefully matched, healthy controls with no such abnormalities. The patients with heart rhythm disturbances had a much poorer ability to perceive and/or anticipate musical rhythm changes than controls. Those patients with a history of very rapid heart beat due to paroxysmal tachycardia appeared to exhibit the worst rhythm appreciation and synchronization skills.

Time urgency, rapid rate of speech, and marked variations in volume and rhythm, and other asynchronous vocal stylistics are characteristic of individuals with Type A behavior. Are there links with other musical elements as suggested below in this contrast with Type B's?

Type A Behavior	Type B Behavior	Musical Components
increased voice volume	voice quieter	volume
fast speech rate	slower speech rate	tempo
short response latency	longer response latency	phrasing
emphatic voice	less emphasis	expression/articulation
hard metallic voice	melodic voice	timbre
less mutuality	increased mutuality	musical relationship
trying to keep control	less need for control	musical relationship
increased reactivity	moderate reactivity	responsive
increased heart rate	decreased heart rate	tempo
higher cardiovascular arousal maintained	cardiovascular arousal returns to lower level	dynamic

One wonders whether the behavioral deviations and aberrations seen in some patients with coronary heart disease might be viewed as being analogous to disruption of musical patterns. If so, could music therapy designed to correct such discordance be used to treat such disturbances? Could improving a sense of beat, cadence, pattern or other rhythmical attributes provide therapeutic benefits for Type A's, or others with various cardiac arrhythmias?

Advances-Winter 1993

Marital Spats And Your Immune System

There is abundant evidence that stress can depress immune system function, and thus increase susceptibility to infections and possibly even cancer. This appears particularly true with respect to the stress associated with bereavement and loss of other important emotional relationships, as well as loneliness and social isolation. A new study now suggests that "nasty marital spats" can also weaken the immune systems of both husbands and wives. Researchers studied 90 couples ranging in age from 20-37 who had been married for an average of 10 months. All described their marriages as happy, none smoked, drank excessively, or evidenced any physical or mental disorder. Each of the couples stayed at a University Research Center for 24 hours and were carefully interviewed and tested for immune system function status. Attempts were made to identify 2 or 3 topics that caused arguments and problems in their relationship, such

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as dealing with in-laws, finances, or personal problems. They then spent 30 minutes vigorously expressing and explaining viewpoints to convince their spouse that they were correct in an attempt to resolve these controversial issues. All argument sessions were videotaped and subsequently independently reviewed, and ratings were obtained for both positive and negative behaviors. Blood samples for immunologic assays were obtained at the beginning of the study and 24 hours later on departure.

Those couples who had the most negative discussions, as judged by severe sarcasm, frequent and vociferous interruptions and criticisms, had the largest declines in immune system function. Newlyweds who were hostile had far greater drops than those who had been married for more than 6 months, and wives experienced greater decreases in immune competency than their husbands. Researchers pointed out that many of the participants may well have suppressed some of their feelings because of the conditions of the experiment, and that in real life situations, there might be much more hostility and even greater impairment of immune defenses. Plans are underway to repeat the study in this same group at some future date to determine whether a longer period of living together results in less immune system depression due to marital stress.

Science News-September 4, 1993

Avoiding The Stress Of Marital Strife

Although marital spats may depress your immune system, keeping your feelings stifled or walking away from an argument may be worse. "Marriages at the highest risk for collapsing are the ones in which the wives suppress their anger and husbands withdraw when challenged", according to one psychologist who specializes in marital problems. Thus, when it comes to arguing with your spouse, you're damned if you do and damned if you don't. So what should you do?

One solution is to acquire skills to help you deal more effectively in conflict situations. This requires learning how to suppress strong efforts to exert your influence and increase your control when disputes arise. Instead, try to replace these natural tendencies with attitudes and actions that indicate that although you disagree, you are still compassionate and understanding. In the long run, it can pay off in many ways, and also improve the chances of getting your point across. There are a variety of strategies and approaches, and three of the most successful skills that can be readily learned and implemented are:

-- Conflict Management - if you sense that an argument is getting out of control, use a previously agreed upon code word or phrase like "peace", or "time out". Then, take a deep breath while focusing on a calming thought or image, and change the topic of conversation to something else.

-- Pay Attention - when your spouse is speaking to you, make sure that you are paying complete attention through appropriate eye contact and body language. Hostility and antagonism increase when your spouse is desperately trying to make a point, and you act nonchalant, disinterested, or are involved in doing something else, like reading or watching TV.

-- Positive Influence Techniques - this is sometimes referred to as the "X,Y,Z" formula. When you are complaining or trying to convince your mate to change an opinion or attitude, simply explain that "when you do X in situation Y, I feel Z". It may help your partner understand why you feel the way you do.

In one experiment, 10 couples were put through a basic training course where they learned and practiced these three stress busting strategies. The couples were then subjected to brief discussion sessions dealing with problems that had been causing angry arguments in their real life relationship. Blood pressures were monitored before, during and after these touchy quarrels, and compared with those obtained from 10 carefully matched control couples who had not received this instruction. Couples who had mastered the communication techniques noted above had much fewer and much less hostile altercations, and blood pressure elevations

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were consistently lower than those observed in the control group.

Some other anger management tips that can help make marriage less stressful are:

1. Agree on a "let's call things off" signal. If you can't say "time out", establish some other ground rules such as making a T with your fingers, when things are getting out of control.

2. Try to state your opinion and make your case without demeaning your spouses' point of view.

3. Say something to indicate that you are sympathetic to other points of view, even though you don't agree with them.

4. Don't be afraid to talk openly about your feelings and areas of disagreement at a time when things are going smoothly. Your mate may be more receptive, and you will be less apt to be nasty, sarcastic, and hostile.

Developing these skills are not only good for your relationship, but also your health. As one authority noted, "if you become a kinder, gentler discussant, you may just live longer".

Longevity-October 1993

In the sex-war, thoughtlessness is the weapon of the male, vindictiveness of the female.

Cyril Connolly

Expressing Emotions And Female Heart Attacks

Most people would agree that it's better for your emotional and physical health to get things off your chest and to be able to express your emotions freely. There appear to be gender differences with respect to this since, as reported in a prior Newsletter, researchers found that unlike men, women who suppressed their anger and hostility when under stress, had less rise in blood pressure than those who vented their feelings. A new report, however, suggests that suppression of anger can be dangerous for women who have suffered a heart attack. Eighty three women were followed for 8-10 years after their first coronary, in an attempt to determine what factors appeared to influence recurrent cardiac problems. "Suppression of emotions, including anger, and a very low sense of time pressure appeared to pose the highest risk." This is just the opposite of findings previously reported in men, and especially Type A's, who have a strong sense of time urgency.

Recurrent heart attacks were also more frequent in those who were divorced and/or employed without having a college degree. Researchers point out that both of these are markers for low income, which might have interfered with obtaining optimal medical care.

Psychosomatic Medicine -Sept/Oct 1993

Women speak because they wish to speak, whereas a man speaks only when driven to speech by something outside himself - like, for instance, he can't find any clean socks.

Jean Kerr

Stress And Depression Rampant In U.S.

If misery loves company and you feel under lots of stress, then you may take some solace in knowing you are not alone. According to a recent report by the National Center for Health Statistics, 40 million Americans are in the same boat. They reported being "depressed, bored, lonely, restless or upset in the two weeks preceding the survey." About 23% of women and 20% of men experienced at least one of these stress-related symptoms, with men more likely to complain of being restless, and women more apt to experience the others. Roughly 5% of both sexes had experienced at least three of these five negative moods in this two week period.

The survey also inquired about smoking and drinking habits, and found a clear correlation between these and feeling bad. Women who frequently felt poorly were more than twice as likely to smoke but did not drink more heavily than non stressed controls. Of the non-stressed men, 5% had more than three drinks a day, whereas those who were often lonely, restless and bored, were twice as likely to be heavy drinkers.

The Wall Street Journal-11/26/93

Book Reviews • Meetings and Items of Interest

Book Review

PANIC, ANXIETY, AND ITS TREATMENT, Klerman, G.L. et al, eds. American Psychiatric Press, Washington, DC, 1993, 162 pages, $28.00

This volume represents the combined efforts and conclusions of a task force of over 2 dozen international experts assembled by the World Psychiatric Association. It provides a comprehensive overview of almost every aspect of anxiety but is nevertheless succinct. Distinctions between panic anxiety, panic attacks, and panic disorder are clearly defined, and the discussion of precipitating factors and comorbidity with other problems is particularly instructive. There is an excellent chapter on the etiology and pathogenesis of panic disorder which acknowledges genetic and familial influences, but also discusses psychodynamic, behavioral, and cognitive theories of causation, and possible mechanisms of action involved. The significance of neuroendocrine and other biochemical abnormalities or markers are considered, as well as the use of new technologies such as positive emission tomography.

The largest chapter in this offering is justifiably devoted to treatment strategies. In addition to discussing benzodiazepines, monoamine oxidase inhibitors, and tricyclic antidepressants, there is also a discussion of serotonin reuptake blocking agents, and drugs whose mode of action has not yet been clearly delineated. Problems related to drug dependency, tolerance, side effects, and cross reactions with other medications are carefully reviewed. In addition, there is also a discussion of psychological and psychoanalytic oriented therapy, and stress reduction measures such as relaxation training, and cognitive-behavioral approaches. The relative advantages and disadvantages of these strategies compared to conventional drug therapy is compared, and the possible advantages of combining both approaches are also considered.

This book covers the subject of anxiety in a practical and thorough fashion. It emphasizes that there is no absolute indication for any specific drug for the treatment of panic disorder, and such decisions must be tailored to the individual situation. Valium might be preferable for some patients with disabling episodes, but antidepressants would be superior for others where the risk of developing addiction would far outweigh any advantages. It is also increasingly clear that behavioral techniques can produce lasting benefits in many panic disorder patients, including those with agoraphobia, and that the incidence of relapse is much lower than that seen with drug treatment. This is a meaty little volume, and well worth its modest price.

Meetings and Items of Interest

January 9-11 Mental Health, Substance Abuse, Managed Health Care, The Fontainebleau, Miami, FL (202) 778-3200

February 22-26 The Impact of Families, Friends, and Social Systems On Health, The Art and Science of Health Promotion Conference, The Broadmoor Resort, Colorado Springs, CO, (313) 650-9600

March 3-8 The Association for Applied Psychophysiology and Biofeedback, 25th Annual Meeting, Hyatt Regency, Atlanta, GA, for info (303) 422-8436

April 13-16 Fifteenth Anniversary Meeting, "Cross-Cutting Dimensions of Behavioral Medicine: Visions for the Future", Park Plaza Hotel, Boston, MA, Contact Laura Hayman (301) 251-2790

May 12-14 National Conference on Psychosocial and Behavioral Factors in Women's Health: Creating an Agenda for the 21st Century, Washington, DC, contact Gwendolyn Puryear Keita (202) 336-6044

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