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Stress and the White House Medical Mystery

The coincidence of Graves' disease in the President and his wife, together with the development of lupus, another autoimmune disorder, in their dog, is described in the press as a "medical mystery." Hyperthyroidism is not contagious, and possible explanations such as contaminated water or some common infection appear to have been eliminated. Each of the three physicians who separately first described Graves' disease emphasized the important precipitating role of stress. By the end of the last century, the disorder was generally viewed as resulting from "prolonged worry as well as to sudden shock." Currently it is claimed by one authority that "well over 80 percent of hyperthyroid patients, if not all hyperthyroid patients are very seriously disturbed emotionally at the time they become ill" and by another "that a period of severe emotional distress always precedes the onset of disease."

An increased number of cases has been noted during every war over the past hundred years. During World War II, hospital admissions for Graves' disease in occupied Scandinavian countries increased five to ninefold, but promptly fell to normal levels after peace was declared. However, the recent Gulf conflict is probably not as relevant as many other stresses suffered by the occupants of the White House, such as unfavorable publicity surrounding Neil Bush and various cabinet members, and alleged undisclosed involvement in the Iran hostage negotiations.

Graves' disease does not occur in animals, except in stressed-out hunted wild rabbits, who demonstrate the typical bulging eyes and other findings. The powerful effects of stress on immune system function and other autoimmune disorders such as lupus, are well known. Possibly being the No. 1 dog and having a book written about you is stressful for Millie. I'm not as sure about her lupus, but would bet that stress in her owners is a far more likely cause of their thyroid problems than perilous plumbing, or a common cold contracted in Kennebunkport.

Paul J. Rosch, M.D.

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Stress and Skin Disease

The skin is the largest organ of the body and one of the most sensitive to the effects of stress. Blushing, sweating, sudden pallor, itching, hives, premature wrinkling, shadows and bags under the eyes are examples. Some distrubing skin disorders like alopecia and psoriasis can also be stress related. However, according to one dermatologist, stress is often overlooked both by physicians and patients. "Most dermatologists aren't used to thinking about treating the mental health of their patients . . . they ask questions about skin dryness, infection, or family history, but may not ask if the patient has been feeling frustrated, anxious, or depressed." Many patients "are afraid of the stigma, even if they recognize that

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For further information on the original source of abstracts and other reprints available on similar subjects, please send a self-addressed stamped envelope to: Reprint Division, American Institute of Stress, 124 Park Avenue, Yonkers, NY 10703.

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STRESS

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Stress and Skin Disease

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anxiety or stress makes their condition worse."

As an example of this, he cited a case of a bus driver whose psoriasis markedly improved after it was discovered that the outbreaks occurred only when he was assigned to drive through a dangerous neighborhood. Reassurance and treatment with an anti-anxiety medication promptly brought the condition under control. Stress by itself is usually not the sole problem, and very often there is some underlying predisposition that causes a recurrence of acne, eczema or psoriasis under stress. Skin problems associated with stress are most apt to occur in inflammatory conditions that tend to be intermittent in their chronicity.

American Health, June, 1991

"A signature always reveals a man's character — and sometimes even his name." Evan Esar

More on Socio-Cultural Hypertension

As noted in prior issues of the Newsletter, hypertension, heart attacks and other "diseases of civilization" tend to be uncommon in stable cultures governed for centuries by ritual and taboo. The increased incidence of such problems in Japanese who migrate to Hawaii or mainland U.S. is believed to result from abrupt changes in behavioral lifestyles, rather than increased salt intake or other dietary influences. Similar factors are thought to be responsible for the increase in sudden death seen in young men from Laos or from the Hmong people , when they are transplanted to England or the U.S. Rapid changes in societal norms and disintegration of traditional values which have occurred in a relatively short period of time constitute the most plausible explanation for the epidemic of stress-related disorders now sweeping Japan and other emerging countries.

Additional support comes from a recent study of older Mexican Americans between 1982 and 1989. Despite their increased adiposity, unfavorable body fat distribution, insulin resistance, and increased incidence of type II diabetes, Mexican Americans have a lower incidence of hypertension compared to non-Hispanic whites. It has been suggested that there may be an "ethnic advantage of some kind, either dietary or lifestyle, or perhaps some other factor" that provides this protection. However, the study also showed that older Mexican-Americans were at greater risk for developing hypertension if they had adapted to an American lifestyle, rather than retaining their native Mexican ways. Acculturation was determined by measuring such variables as "fluency and preference in reading, writing, and speaking in English and Spanish." Hypertension was present in 14% of women and 9.4% of men in the lowest acculturation category, compared to 31 and 42% in the highest, in the 55 to 64 age group with similar but lesser differences in those over 65.

Cardiology World News, May, 1991

"In times like these, it helps to recall that there have always been times like these."

Paul Harvey

Hassles, Stress and The Immune System

There is increasing evidence that minor irritating daily hassles contribute to illness just as much, if not more, than major life change stresses. Support for this comes from a recent study in which two groups of healthy 18-45 year-olds were studied for four weeks to six months. They were asked to complete questionnaires listing daily hassles such as traffic and work irritations; immune system function was measured periodically; and a record was kept of health complaints. The researchers found that those who had the most aggravation from daily hassles also showed the lowest natural killer cell activity and experienced more illnesses of all types. While a link between stress, the immune system and illness can be found in all ages, it appears to be strongest in those under 30. It has been suggested that the reason for this might be

Hassles, Stress and The Immune System

that such individuals may perceive events more intensely and not cope as well, or that they experience emotions more deeply than the middle-aged or the elderly. "We often have not found a way to deal with stressful events and perceive them as more threatening than older individuals. Those subjects with low killer cell activity also appeared to be more "angry and confused," than others with normal or elevated levels. *USA Today, 5-7-91*

"Hating people is like burning down your own home to get rid of a rat." — H.E. Fostick

Skyrocketing Medical Costs Leading Business Concern

A recent *Fortune* poll of almost 200 chief executives of Fortune 500 revealed that nearly two out of three labeled "skyrocketing medical costs one of the worst poblems facing America's corporations." More than a third singled out escalating medical insurance expenses as the single greatest problem they will confront in this decade. Over the past ten years, health care medical costs have increased 118 percent, with a current annual cost of health care pegged at $3,000 for the average American worker. It is anticipated that this figure will rise between 11 and 15 percent annually over the next five years.

The major culprit appears to be soaring liability awards which drive up malpractice insurance. However, expensive technology and unnecessary medical procedures were also cited. Although 95 percent of the CEOs indicated that they were satisfied with the quality of health care their employees received, most said that they were concerned that they would not be able to afford it.

Gannett Suburban newspaper, 6-14-91, AFP, Vol. 43, No. 6.

"Money is like a sixth sense and you can't make use of the other five without it." — W. Somerset Maugham

More Links Between Anger And High Cholesterol

A new study reported at a recent meeting of The American Heart Association disclosed that teenagers who are hostile are much more likely to have elevated cholesterols twenty years later. The researchers followed 830 students who had taken personality tests as teenagers 20-25 years ago. Those who scored high on a hostility subscale of the MMPI had the highest levels of total cholesterol in their blood as well as lower amounts of HDL or "good cholesterol." It is postulated that anger is associated with an increased secretion of adrenalin and other stress-related hormones. These break down fat stores, releasing them into the blood stream, and causing elevation of cholesterol and other fatty substances. In another report of almost 1,000 men who had been followed for 8-10 years, it was found that those who reacted to emotionally arousing situations with strong anger were much more likely to die of sudden death due to cardiac arrest. *Palm Beath Post, 11-14-90*

"I like the word "indolence." It makes my laziness seem classy." — Bern Williams

Biological Basis of The Stress Response

Seyle's General Adaptation Syndrome was based on the supposition that there was a common nonspecific response to a variety of different or even opposite stimuli, like excessive heat or cold. More recently, however, there has been a great deal of evidence to suggest that variations in perception and control result in very different patterns of

Dr. Paul Rosch; Dr. James P. Henry, M.D., recipient of the Hans Seyle Award from the 3rd Montreux Conference; and Dr. Stewart Wolf.

neuroendocrine responses to stress. A challenge which is perceived as easy to handle will primarily elicit an active response and a norepinephrine

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Biological Basis of The Stress Response

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release which is confined to the sympathetic nervous system. Testosterone rises as the subject savors success. However, with increasing anxiety, this active coping shifts to a more passive mode and behavior becomes less confident as control is lost, at least in animal models. Norepinephrine/epinephrine ratio decreases, while epinephrine, prolactin, renin, and fatty acids rise. As the eventual outcome of the stressful situation becomes less and less certain and the stressful state persists or is augmented, ACTH and cortisol levels also rise.

Thus, it appears that the effort required in one circumstance, and the degree of frustration, conflict, and uncertainty which predominates in the other, determine the ratio of catecholamine to corticoid excretion. Catecholamines are the premiere hormones responsible for the "fight or flight" response. Corticoids are the major hormonal response to Selye's "Alarm Reaction." Interestingly enough, in animals subjected to severe emotional trauma, cerebral dysfunction supervenes, corticoids paradoxically return to normal, and behavioral changes start to resemble those seen in Post Traumatic Stress Disorder. Denial begins to set in, attachment and social behaviors disintegrate, and the characteristic response of the animal tends increasingly to be one of irritable indifference.

Abstract of James P.. Henry, M.D., Drew Medical School, Los Angeles, CA (3rd Montreux Conference)

"Some people can stay longer in an hour than others can in a week." Willlam Howells

The Stress Reduction Effects of Spa Therapy

Dr. Richard Gubner, Medical Director of The Safety Harbor Spa in Florida, chaired the above entitled session of the 3rd Annual Montreux Conference. Presentations were also made by Dr. Francois Forrestier of Aix-les-Bains and Madame Nadine Brod of Contrexville, directors of these two world-renowned French spas. Dr. Gubner traced the history of spa therapy, indicating that traditionally this is based on the medicinal use of waters administered both internally and externally. In recent years, and particularly in the United States, the term "spa" has often been misappropriated to apply to all sorts of resorts and recreational facilities not medically oriented, or which often make health claims that are difficult to substantiate or support scientifically. Most traditional spas are located in areas containing natural waters or springs with health-promoting properties. Thus, the Epsom spa in England is known for its Epsom salts, rich in magnesium sulfate, which has choleretic effects that stimulate bile flow as well as the emptying of the gall bladder. The famed mineral waters of Saratoga in the United States, and those of many other European spas like Vichy, are similarly attributed to their high content of minerals.

In addition to therapeutic gastrointestinal effects, such waters, which are rich in calcium and magnesium, have long been popular because of their cardiovascular benefits. Recent research now confirms the value of these elements in the treatment of coronary artery disease, and particularly their ability to reduce disturbing and potentially fatal heart rhythms. A variety of studies in the United States, England, and Europe have also shown that drinking water with a high content of magnesium and calcium protects against sudden death due to ventricular fibrillation. A recent French report revealed that regular consumption of such waters also produced a marked improvement in bone density and a decrease in vertebral fractures. This may be due to their increased content of fluoride as well as calcium and magnesium. Fluoride is widely utilized to protect against dental caries as well as osteoporosis.

Various types of baths have long been a mainstay of spa therapy. The beneficial physiologic effects of water immersion have been known for centuries with respect to its ability to cause profound elimination of fluids in patients with dropsy or edema. This is illustrated by the following clinical description made by Dr. Alexander Southerland in 1744: "James Crook, of Long Acre, had dropsy, jaundice, palsy, rheumatism, and inveterate pain in his back — in three immersions, the swelling of his legs sunk, so did the pain of his back. From the rigidity and the pressure of the immersion fluid, we may account for his pissing more than he drank." It has been noted that significance diuresis often begins within five minutes of total body immersion and may last for several hours. Only very recently has the explanation for this phenomenon been elucidated. Hydrostatic pressure during water immersion displaces blood volume to the thorax, distending the atria and stimulating the release of atrial natriuretic peptide hormone. In addition, there is a marked reduction in adrenal and kidney hormones which cause salt and water retention. A variety of other forms of hydrotherapy also employed at spas are designed either to stimulate the circulation or reduce stress.

Many of the salubrious benefits of spas may

The Stress Reduction Effects of Spa Therapy

have to do with their change in environment and relief from daily pressures which cannot be avoided at home or work. Individuals forced to adhere to a spa regimen of diet, exercise, and rest are often rewarded by a lowering of blood pressure, reduced angina, weight loss, and relief of stress-related gastrointestinal symptoms, insomnia, tension headache, and muscle spasm. Today's modern spas usually provide a carefully designed full day of structured activity that includes careful attention to exercise, fitness, diet, stress reduction and, if indicated, smoking, diabetes, blood pressure, or coronary disease counseling. In addition, there are group outdoor sports activities, including tennis, golf, and volley ball. While traditional spas originated near the site of natural mineral water springs with curative properties, more modern facilities are usually situated in attractive scenic areas with superb climates.

Dr. Gubner closed his presentation by noting that Marilyn Von Neumann, who reportedly has the world's highest recorded I.Q., responded to an inquiry as to how she handled stress with a single word, "massage." This is, of course, one of the key services provided by all spas, and, as noted in previous Newsletters, has become an increasingly popular technique for stress reduction offered by many corporations.

Abstract of Dr. Gubner (3rd Montreux Conference)

"Everything happens to everybody, sooner or later, if there is time enough." George Bernard Shaw

The Diagnosis and Treatment Of Depression with Cranial Electrical Stimulation and Auditory Stimuli

Dr. C. Norman Shealy reported upon research studies in 150 patients suffering from depression. Almost all had been unresponsive to a variety of antidepressant drugs for many years. Treatment consisted of transcranial electrostimulation for one hour, five days a week for two weeks. In addition, auditory stimuli were provided for ten hours, utilizing special therapeutic tables containing 10-20 speakers. This allows the entire body to participate in whatever auditory stimuli are being provided. These have included a variety of classical music or modern music selections, depending on patient preference, as well as simple auditory frequencies ranging from 7.83 to 54.6 hertz. In addition, over this two-week period, the patients also received ten one-hour lectures dealing with stress and health.

Serum levels of serotonin, beta endorphin, norepinephrine, cholinesterase, and melatonin were measured in all patients at the beginning of treatment and three months after completing this two-week intensive program. All patients were instructed to practice relaxation techniques using the same music they had been conditioned to for 20 minutes twice a day, over the three month post treatment period.

Follow-up studies revealed that 72% of the patients who satisfactorily completed this program had significant clinical improvement. In addition, the Zung and Beck depression rating tests, which had previously been utilized to confirm this diagnosis, were no longer abnormal in this group of patients.

Abstract of Dr. C. Norman Shealy (3rd Montreux Conference)

"Some people are willing to work only if they start at the top and work up." Robert Anthony

Psychophysiological Stress Assessment

Drs. Lyle Miller and Alma Del Smith reviewed their evaluation and treatment approach at The Biobehavioral Institute of Boston where 500 to 600 patients a year are referred for diagnosis and treatment of stress-related symptoms, usually by primary care physicians. In their experience, stress is frequently used as a euphemism or a convenient explanation for difficult diagnostic problems. There is a need to observe caution with respect to this and avoid the common tendency to assume that unexplained complaints are stress related. The first obligation is to be certain that there is no organic basis for the patient's problem. Therefore, the initial diagnostic step must be to rule out stress as the cause of the presenting complaint.

To accomplish this, an intake battery of tests, including the MMPI, the STRESS AUDIT (SA), the Psychophysiological Stress Assessment (PSA), are administered to all new referrals. The MMPI provides insight into possible contributing personality factors; the SA assesses the patient's level of perceived stress, stress-related symptoms and susceptibility to stress; the PSA describes patterns of somatic responses to stress. In cases where the pattern of psychophysiological reactions to stress is inconsistent with the individual's complaints, alternative causes for symptoms must be carefully reevaluated and explored in depth.

The data from this intake battery of tests are interpreted within the framework of a Biobehavioral Model of Stress (BBMS). This results in a prescriptive diagnostic formulation of the patient's stress-related

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Psychophysiological Stress Assessment

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problems. Treatment plans may include psychotherapy, cognitive restructuring, progressive muscular relaxation, respiratory retraining and meditative approaches, behavior modification, biofeedback, etc. The choice of one or more of these modalities depends on the diagnosis and the likelihood of patient adherence to the regimen prescribed. At the workshop, examples were presented within the Biobehavioral Model of Stress framework and examples of the diagnostic usefulness of the Stress Audit and Psychophysiological Stress Assessment were demonstrated in a most impressive fashion.

Abstract of L.H. Miller, Ph.D. and Alma Del Smith, Ph.D., 3rd International Montreux Congress on Stress

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"Never be the the first to use a new drug, nor the last to discard an old one."

L.S. Goodman

Computerized Stress Assessment and Therapy

The STRESSCHECK program is a 20-minute diagnostic program that is used by patients in an office setting. Patients learn to connect various stressful events with specific emotional and somatic responses. By being helpled to think through their desire and motives, they gain further insight which improves their ability to deal with stress-related problems.

A major advantage of this program is that the doctor receives a printout of the transaction and can institute appropriate interventions or refer the patient elsewhere. Thus, this program facilitates both early diagnosis and treatment. In many cases, psychosocial information is provided which would, in most instances, not be available to the physician. In particular, it allows the assessment of "exhaustion and withdrawal states" which other speakers at this Congress have suggested may be predictive for myocardial infarction.

The THERAPEUTIC LEARNING PROGRAM (TLP) has previously been referred to in the Newsletter. It is a sytematic, quality-controlled intervention directed at the unresolved problems of daily life which lead to the stress-exhaustion response. Unlike other psychotherapeutic approaches, this unique investigative instrument quickly identifies major problems by prompting with pertinent questions based on previous answers. It also serves as a learning tool since it generates a valuable record and personalized "self help" book for the patient to use in the future.

Recent reports suggest that in an effort to contain costs, there has been an increasing trend to reduce mental health services. Many authorities believe that this will prove to be more expensive in the long run. There is considerable evidence indicating that the availability of early psychological counseling for stress problems can be quite cost effective. The mass delivery potential of the THERAPEUTIC LEARNING PROGRAM might be a solution, since it does not require individual sessions with a psychologist or psychiatrist and can be pursued by the patient at a convenient time, place, and pace, and at much less cost.

Roger L. Gould, M.D., 3rd International Montreux Congress on Stress

Panel discussion at 3rd International Montreux Congress on Stress

Psychological Factors In Hypertension

There are a variety of reasons why researchers disagree about the importance of psychosocial factors in the etiology and the course of essential hypertension. As has been previously pointed out in the Newsletter, once subjects become aware that they are hypertensive their behavior often changes. One important illustration of this is that their absenteeism rates significantly increase, when compared to individuals with similar elevated levels of blood pressure who are unaware that they have hypertension. Individuals with recent discovery or asymptomatic hypertension, who had no symptoms, actually seem to be relatively insensitive to what is going on in their lives and may even tend to under-report symptoms or problems. Other studies have shown that subjects with a family history of hypertension are also more likely to have such alexythimic traits. Obviously, if these two groups are not differentiated in studies attempting to associate

Psychological Factors In Hypertension

psychological factors in the development of hypertension, there could be considerable confusion because of the intermingling of these two groups with very different attitudes, health complaints, and social behaviors.

Twenty-eight-year-old patients with both early and late stage hypertension were studied. The method of recruitment was devised for the specific purpose of identifying a large number of asymptomatic cases of hypertension. A standardized interview technique to record and evaluate emotional coping styles was utilized. Asymptomatic men with early hypertension had significantly higher alexithymic scores than normotensives. Alexithymia may be defined as an inability to express feelings with words. In particular, hypertensive patients reported comparatively little joy in their lives and also had problems with the expression and handling of sorrow. In other research, using this same standardized interview, patients in a hypertension clinic who had responded to drug therapy were compared with those who had not. It was demonstrated that the latter group also tended to have higher alexithymia scores than those who did well with drugs. The poor responders similarly had more difficulty in dealing or expressing emotion such as sorrow and anger.

In another ongoing study, middle-aged hypertensive men and 28-year-old workers were evaluated in an attempt to study the relationship between job strain and blood pressure. Job stress in this context was defined as an occupation in which the individual perceives that there is a great deal of demand, but little decision-making latitude. An analysis of the younger group revealed a definite correlation between elevated pressures and high strain jobs. However, these higher pressures were seen only during work activities and were normal at other times. In the study of middle-aged men, it was clear that even diastolic blood pressures tended to be elevated in the high job strain group as compared to others. However, this distinction persisted throughout the day and were even more pronounced during sleeping hours.

While these two studies do not prove the conclusion that job strain causes sustained hypertension, it is hard to ignore the suggestive evidence it provides to substantiate this hypothesis. Other support comes from studies which investigated the role of other possible risk factors such as alcohol consumption, family history, weight/height index and Type A behavior. The relationship between job strain and hypertension persisted even when these influences were considered. Most studies of job stress use self-report measures to rate the degree of the problem, as was done in this case. Even with this technique, there was a strong relationship between job stress and diastolic hypertension. Finally, as reported in a previous Congress, this research has also shown that elevated pressures during job strain working hours are apt to be highest in those with a family history of hypertension, and who also exhibited significant changes in cortisol, testosterone, and prolactin levels. The significance of the latter findings is unclear and is bring further investigated.

This and other research suggest that alexithymic traits may be of extreme importance, both in the etiology of hypertension and its subsequent course. It also suggests that job strain may lead to the development of sustained hypertension. Transient blood pressure elevations due to stress may occur during working hours in vulnerable subjects. Whether this leads to fixed hypertension is still under investigation.

Tores Theorell, 3rd International Montreux Congress on Stress

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U.S. News and World Report **asked almost 200,000 college freshmen what they considered to be their most important goal in life. The leading immediate answer was "being wealthy." Next, in order of importance were: 1) raising a family 2) being an expert in their field 3) helping the less fortunate 4) developing a philosophy of life 5) promoting racial understanding 6) cleaning up the environment 7) creating artistic work.**

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Book Reviews • Meetings and Items of Interest

Medical Anthropology: Contemporary Theory and Method. Johnson, M.T. and Sargent, C.F., Eds., Praeger, New York, 1990, 488 pp., $95.00 ($29.95, softcover).
This is an excellent series of chapters that vividly illustrate how much medical anthropology has evolved into its own specialty over the past decade. The chapters are arranged in five sections, and cover basic issues that underlie theoretical concerns, the wide disparity in medical thinking throughout the world, recent trends in cross-cultural studies of health and healing approaches, the medical consequences of the interaction of various populations with changing cultural environments, and research methodologies as well as future trends. There is a particularly valuable chapter by Drexler on Culture, Stress and Disease, which reviews cross-cultural perceptions and distinctions, particularly with respect to the varying significance of social support. As the author notes, "research on migration, acculturation, and other factors, such as the Type A behavioral pattern, needs to be incorporated into more comprehensive models of stress and disease." Addi-tional valuable chapters deal with ethnopharmacology and studying biomedicine as a culture system. This volume is extremely well referenced and a gold mine for those interested in any aspect of medical anthropology.

Meetings and Items of Interest

July 1-5, Behavioral Medicine, Albert Einstein College of Medicine, Cape Cod, MA (212) 430-2307.
July 8-12, Psychotherapy and Spirituality, Albert Einstein College of Medicine, Cape Cod, MA (212) 430-2307.
July 22-26, Developmental Psychotherapy, Albert Einstein College of Medicine, Cape Cod, MA (212) 430-2307.
July 25, Panic Disorders Workshop, Univ. of Alabama School of Primary Medical Care, Huntsville, AL (205) 551-4482.
July 27-Aug. 3, Creativity and Madness: Psychological Studies of Art and Artists, Self Psychology and Psychotherapy, American Inst. of Medical Education, Santa Fe, NM (818) 789-1029.
July 29-Aug 2, Clinical Approaches to Intimacy in Couples Therapy, Psychological Trauma Research and Treatment through the Life Cycle, Massachusetts Mental Health Center, Harvard Medical School, North Falmouth, MA (617) 734-1300 ext. 469.
Aug. 16-20, American Psychological Association, San Francisco, CA (202) 955-7706.
Sept. 12, 13, 7th Annual Blue Cross and Blue Shield National Health Management Conference, San Francisco, CA, 415-445-5888.
Oct. 24-26, State of the Art in Addictive Medicine, American Society of Addiction Medicine, Orlando, FL (212) 206-6770.
Oct. 31-Nov. 2, Psychotherapy and the Patient with a Medical Illness, Harvard Medical School, Cambridge, MA, 617-432-1525.
Nov. 8-10, Hypnosis in Psychotherapy and Behavioral Medicine, College of Physicians and Surgeons of Columbia Univ., New York, NY, 212-305-3682.
Nov. 8-10, Psychiatric Update for Physicians: Depression, Anxiety Disorders, Psychomatics, Brief Counseling Techniques, University Hospital: Mood Disorders Program; Sehon Buchanon Medical Media, Vancouver, BC, Canada (614) 922-3570.
Nov. 22-24, The Psychiatric Interview, Univ. of Chicago School of Medicine, Chicago, IL, 312-702-1056.

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