

Diuretics Deplete Magnesium, Too

Diuretic therapy is a recognized cause of magnesium depletion, but in contrast to potassium depletion, it is seldom given attention.

The serum magnesium concentrations of 320 elderly patients (average age 81) who were receiving loop or thiazide diuretic therapy at the time of admission to a Glasgow, Scotland, hospital, were found to be significantly lower than those of 250 control patients who weren't taking diuretics, according to a study by B. J. Martin, M.D., and K. Milligan, RD. Many of those on diuretic therapy were also taking potassium supplements, but none had been given magnesium.

Martin and Milligan found that their elderly patients typically had an inadequate dietary intake of magnesium. Sources of magnesium are whole grains, fish, beans, corn, nuts, bananas, cocoa, and dark green vegetables. Magnesium deficits can cause muscle irritability and seizures. Serum magnesium levels should be monitored in patients taking diuretics, say the authors, and magnesium supplements should be given when needed.



The RDA for older males is 350 mg and 300 for older females.

Source: "Diuretic-Associated Hypomagnesemia in the Elderly," *Archives of Internal Medicine*, October 1987.

Exercise for the "Young-Old" And "Old-Old"

Fewer than a third of the 25 million Americans who are over 65 engage in regular exercise, reports Mary E. Wheat, M.D., of Montefiore Medical Center in New York City. As a result, even simple activities like making a bed or getting dressed may use up 50 percent of their maximum aerobic capacities. Yet mild exercise can improve that work capacity, says Wheat.

For the **young-old**—those aged 65 to 75—walking, cycling, or other moderate aerobic activities are recommended. Most studies show an optimal benefit from training three days a week. Each session should begin with five to 10 minutes of stretching and flexibility exercises, followed by 30 minutes of increasing the heart rate and ended with cool-down and flexibility exercises. Sedentary elderly people should start gradually by alternating two to three minutes of increased activity with the same amount of rest over a 15-minute period. The total period of increased heart rate may be raised five to 10 minutes a week until the 30-minute goal is reached.

For the **old-old**—over 75 years of age—Wheat recommends shorter but more frequent periods of low-impact activity, such as a goal of 15 to 20 minutes of walking six



times a week. To build endurance, the exercise regimen can start with 30 seconds of activity alternated with 30 seconds of rest. Activity intervals can be increased by 30 to 60 seconds each week as endurance improves. For people in this age group, aerobic training isn't the goal. The emphasis, instead, is on walking and range-of-motion exercises, which can improve strength, balance, flexibility, and coordination.

Source: "Exercise in the Elderly," *Western Journal of Medicine*, October 1987.

Side Effects... From Placebos

It seems that when patients are warned about the potential side effects of drugs, they're more likely to feel those effects.

Martin G. Myers, M.D., of Sunnybrook Medical Centre in Toronto, working with researchers from McMaster University in Hamilton, Ontario, found that patients who were given a placebo reported a high rate of minor gastrointestinal problems if those problems were mentioned as possible side effects. In another group of patients who were not told about possible gastrointestinal problems, far fewer subjects were affected.

Health professionals must warn patients about drugs' side effects. But warnings need to be carefully worded

to reduce the power of suggestion. An editorial accompanying the study suggests that patients be told, "You may develop some but not all of the side effects mentioned."

Source: "The Consent Form as a Possible Cause of Side Effects," *Clinical Pharmacology and Therapeutics*, September 1987.

Debunking Myths About Retirement

Gerontologists continue to debunk myths that portray aging in a negative light. One common myth is that retirement increases the risk of illness and death. In fact, research literature contains virtually nothing to support the notion that retirement is detrimental to the physical health of older workers, says David J. Ekerdt, Ph.D., of Boston's VA Outpatient Clinic and Boston University School of Public Health.

Research does show that 25 to 30 percent of retirements occur primarily due to illness or disability. But that leads to the misconception that retirement itself causes ill health rather than the other way around. Health deterioration soon after retirement is most often a continuation of pre-retirement illness, concludes Ekerdt.

Source: "Why the Notion Persists That Retirement Harms Health," *The Gerontologist*, August 1987.

Tests for Urinary Incontinence

Older women often lose urine when they cough, laugh, or lift (stress incontinence), or they

experience a sudden urge to urinate before they can get to a bathroom (urge incontinence).

They may be embarrassed to report those problems or fearful of what the physician will find. Health professionals can ease the way to prompt medical treatment by describing the usual tests.

For either type of incontinence, the first step is a physical examination to check for urinary-tract infection, gynecological problems, or fecal impaction, according to Ananias C. Diokno, M.D., of William Beaumont Hospital in Royal Oak, Michigan. If those problems are ruled out, the next step is testing bladder function. In Diokno's study of 200 female outpatients aged 55 and up, a simple, low-cost provocative full-bladder stress test was found to be accurate in detecting urethral incompetence as a cause of stress incontinence. Provocative upright cystometry was helpful in detecting detrusor hyperactivity that was not provoked in a supine position. The author concludes that more complex tests are needed only in complicated cases.

Source: "Urinary Incontinence in Elderly Women: Urodynamic Evaluation," *Journal of American Geriatrics Society*, October 1987.

Improving Cancer Pain Control

Among terminal cancer patients, 75 percent have problem pain, but 25 percent of them die without adequate pain control, report Malcolm L. Brigden, M.D., and Jeffrey B. Barnett, B.Sc.Pharm., of the Victoria Cancer Clinic at the Royal Jubilee Hospital in Victoria, British Columbia. Many patients suffer need-

lessly because of improperly used pain medication.

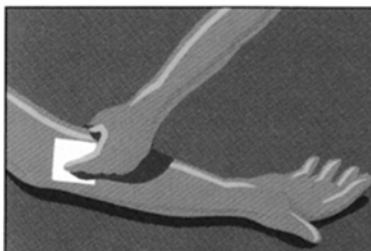
Careful choosing of pain medication and dosage scheduling is essential, say Brigden and Barnett. A nonnarcotic oral pain reliever (analgesic) such as aspirin or acetaminophen should be tried first so that the patient can remain mobile. If pain worsens, a weak narcotic (codeine), then a strong narcotic (morphine) can be added to improve the pain control.

Whichever agents are used, the dosage given must be sufficient to relieve the pain. Patients who are denied an adequate dose of analgesic, say authors Brigden and Barnett, become preoccupied with pain and turn into "clock-watchers," anticipating the next medication dose. This fear and anxiety may actually increase the sensations of pain. Withholding the next



dose of pain medication until the patient feels discomfort can also increase suffering. And the pain may be harder to control once it recurs. To avoid this, the authors advise, patients should receive doses of analgesics that are high enough to relieve their pain, with each dose given on schedule, before the effects of the prior dose have worn off.

Source: "A Practical Approach to Improving Pain Control in Cancer Patients," *Western Journal of Medicine*, May 1987.



A New Blood-Drawing Method

After blood is drawn, the usual procedure is to put cotton or gauze over the puncture site, then to bend the arm at the elbow to stop bleeding. In a study by A. Dyson and D. Bogod at University Hospital of Wales in Cardiff, this method led to noticeable bruising in 15 of



20 patients tested. However, when patients were told to exert pressure while keeping their arm extended, only six of 20 developed even a small bruise.

Source: "Minimizing Bruising in the Antecubital Fossa After Venepuncture," *British Medical Journal*, June 1987.

Diagnosing Alzheimer's Disease

Abnormal findings on several neurological tests may help confirm a diagnosis of Alzheimer's disease, say F. Jacob Huff, M.D., and his colleagues at the University of Pittsburgh's Alzheimer's Disease Research Center.

In this study, the most common neurological abnormality seen in Alzheimer's disease patients was the presence of release signs (abnormal reflex responses). For example, light tapping of their closed lips near the midline caused pursing of the lips (the snout reflex), a sign of defective pyramidal innervation of the facial musculature. Many Alzheimer's patients also exhibited the palmomental reflex, in which a brisk scratch on the palm of the hand causes contraction of muscles in the chin. Although release signs were the most common abnormality, the authors note that the signs occurred in only 55 percent of the patients with Alzheimer's disease and were also present in 9 percent of the control subjects. Thus, release signs alone are neither sensitive nor specific enough to serve as diagnostic markers

for Alzheimer's disease.

Neurological testing in Alzheimer's disease patients also revealed an increased incidence of olfactory deficits, abnormal gait (often with short steps), and difficulty in identifying objects by touch (impaired stereognosis) or by having them traced on the skin (graphesthesia).

Source: "The Neurologic Examination in Patients With Probable Alzheimer's Disease," *Archives of Neurology*, September 1987.

Age-Old Problems

Researchers tend to blame aging for losses in mental and physical functioning. But the negative effects of aging have been exaggerated, according to John W. Rowe, M.D., of Harvard Medical School and Robert K. Kahn, Ph.D., of the University of Michigan in Ann Arbor. In fact, many problems that are blamed on aging can actually be explained by poor habits related to lifestyle, diet, and psychosocial interactions, the authors believe.

They note that many older people (women especially) develop crippling osteoporosis. But Rowe and Kahn observe that this common disorder, previously considered to result from the "normal" aging

process, may in large part be preventable or modifiable. Among the causative factors that do not relate to aging: cigarette smoking, heavy alcohol intake, inadequate calcium intake, and lack of exercise.

In addition, some supposedly age-related decreases in cognitive functioning can be reversed by training, the researchers find. And psychotherapy can sometimes reverse the mental and emotional impairments often seen in elderly people who experience bereavement and social isolation, they say. That many older people develop these problems, the report concludes, doesn't mean that the impairments are a normal or natural part of aging.

Source: "Human Aging: Usual and Successful," *Science*, July 1987.

Paranoia in Older People

Many older people display what may seem like paranoid behavior: they become suspicious that others are acting against them or taking advantage of them. Although this behavior is difficult to deal with, it's important to recognize that their fears are sometimes justified, advises



Charles V. Ford, M.D., of the University of Arkansas for Medical Sciences in Little Rock. Older people are, for example, frequent victims of theft and consumer fraud and, occasionally, of the greed of children or other relatives. So some suspiciousness isn't surprising.

As people grow older, they become more dependent on others. If they lose control of their own affairs, they may soon start to believe they are controlled by others and to blame others for all that goes wrong, explains Ford. Blaming others is also a way of protecting self-esteem. For example, it's easier to accuse someone of moving your possessions than to acknowledge that you can't remember where you've put things. Often health professionals can minimize those fears and accusations by helping elderly people maintain as much control over their lives as possible.

Paranoid fears are also common in older people who develop mental impairment. Their paranoid behavior may be accompanied by delusions or hallucinations. In cases of acute psychosis, low doses of antipsychotic drugs may help to relieve those symptoms, but drug use should be discontinued when the symptoms subside.

Source: "Caring for the Paranoid Elderly," *Medical Aspects of Human Sexuality*, August 1987.

Nursing-Home Versus Own-Home Benefits

Health-care providers are becoming more interested in alternatives to costly institutionalization of the frail elder-



ly. Kathryn L. Braun, Dr.P.H., and Charles L. Rose, Ph.D., of the University of Hawaii in Honolulu, compared groups of elderly patients who spent three months in either a nursing home, a geriatric foster home, or in their own home (with supportive services provided). By the study's end, patients in the two community settings (foster homes and their own homes) were more mobile, felt better, and showed greater improvement in their ability to perform daily activities such as feeding and dressing themselves.

An important finding: Community-based care was much less costly than nursing-home care. Braun and Rose conclude that home-based long-term care is appropriate and economical for a substantial sector of geriatric patients.

Source: "Geriatric-Patient Outcomes and Costs in Three Settings: Nursing Home, Foster Family, and Own Home," *Journal of American Geriatrics Society*, May 1987.

Sexual Problems In Older Men Can Be Treated

Fewer than 15 percent of men over the age of 80 engage in sexual intercourse, but more than 50 percent would like to. The decline in frequency of intercourse is usually because of an inability to initiate or maintain an erection, according to Thomas Mulligan, M.D., and P. Gary Katz, M.D., of the Medical College of Virginia in Richmond.

Older men interested in participating in sexual intercourse can be helped to do

so, often without surgery, report Mulligan and Katz. First, a general medical examination can help identify contributing factors, such as vascular, neurological, endocrine, psychological, and drug-related problems. In addition, a complete sexual history should be obtained.

Most health-care professionals don't bring up the subject of sex with their older patients. "Dysfunctional patients are often grateful someone has finally asked," say the authors.

For men who smoke, breaking the habit often leads to improved blood flow to the penis, which may improve erectile function. For men who are taking diuretics, antihypertensive agents, or other drugs known to cause impotence, switching to another medication is often helpful. If hormone measurements indicate that serum levels of testosterone are low, testosterone replacement may improve sexual function.

If those steps fail, the authors recommend a trial of external suction devices, which help to stimulate an erection, or the use of papaverine, alone or with phenolamine, self-injected directly into the penis, which produces a long-lasting erection. Because many elderly men have distal-vessel disease, penile arterial revascularization usually is not an option, say Mulligan and Katz. Greater success has been reported with surgically implanted penile prostheses. According to the report, the overall success rate of these implants is high, with few complications.

Source: "Erectile Failure in the Aged: Evaluation and Treatment," *Journal of American Geriatrics Society*, January 1988.

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