ARTHRITIS AND RHEUMATISM ASSOCIATES

RHEUMORS

A NEWSLETTER FOR PATIENTS

VOL. 10, NO. 2 • SUMMER, 2000

DC OFFICE CONTINUES TO GROW

Margaret Dieckhoner, Administrator

Werner F. Barth, MD is a much recognized name in the rheumatologic community. Dr. Barth joins our group in July and will practice in our K Street, NW office. We are extremely proud to welcome him to our practice.

Dr. Barth, former chairman of the section of Rheumatology at the Washington Hospital Center, maintains a national reputation in the field of arthritis and rheumatology. He has published numerous journal articles, made contributions to several books, and through his dedication to resident and medical student education, has succeeded in training hundreds of physicians, many of whom today are practicing rheumatologists in the Washington metropolitan area.

Dr. Barth, a native of New York, did his undergraduate training at Columbia College and received his doctorate of medicine from Albert Einstein College of Medicine. His diverse post graduate training included rotations at Barnes Hospital in St. Louis, MO, the National Cancer Institute, NIH and the University of Washington, Seattle, WA. After completing his residency, Dr. Barth returned to the Washington, DC area and spent the next three years as an investigator in the Arthritis Branch of the National Institute of Arthritis and Metabolic Diseases. He then went on to the University of Maryland, Baltimore, where he was appointed Associate Professor of the Department of Medicine and the Chief of the Arthritis Division. After four years in Baltimore, he was recruited by the Washington Hospital Center to develop and chair the section of Rheumatology, where he practiced for 28 years.

Dr. Barth's career has encompassed many exciting dimensions of medicine. His writing has been prolific and includes over 75 journal publications and several textbook chapters. He has been a consultant at area hospitals including an appointment as Professor of Medicine at The George Washington University Hospital and chairman of the Department of Medical Specialties at the National Rehabilitation Hospital for over ten years. He has maintained an active role in many professional organizations and most recently had the honor of serving as Governor of the DC Chapter of the American College of Physicians-American Society of Internal Medicine (ACP-ASIM). He will be receiving the Laureate Award in

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P O I N T S O N J O I N T S

NEW NIH CONSENSUS REPORT ON OSTEOPOROSIS RELEASED

Robert L. Rosenberg, MD

The National Institutes of Health sponsored the second Consensus Development Conference on Osteoporosis Prevention, Diagnosis and Therapy held March 27-29, 2000. The draft consensus statement addresses the following issues: Definition of osteoporosis and its consequences, risks for various groups, factors in skeletal health, evaluating and treating osteoporosis and osteoporotic fractures and directions for future research.

Osteoporosis occurs in all populations and at all ages. Though more prevalent in white postmenopausal females, it often goes unrecognized in other populations such as African American, Asian and Hispanic women and white men. Ten million Americans have osteoporosis with another 18 million at risk with low bone density. Twenty percent of osteoporosis occurs in men. Someone who does not reach optimal peak bone mass (PBM) during childhood and adolescence may suffer from osteoporosis when accelerated bone loss occurs post menopause and with aging.

Osteoporosis is a serious disorder with significant physical, psychosocial and financial consequences. Hip fractures can be particularly devastating with 20% of patients dying within one year of a hip fracture and 66% not returning to their previous level of independence.

The risks for osteoporosis include female gender, increased age, estrogen deficiency, white race, low body weight, family history of osteoporosis, smoking and history

see **NEW NIH** *continued on page 5*

A N S W E R S To Your Questions

John L. Lawson, MD
Norman S. Koval, MD
Emma Dilorio, MD

Q. I am hearing a great deal about glucosamine and chondroitin sulfate to treat arthritis. Can you tell me more about this?

A. Recently, The Arthritis Cure and other books, health and nutrition stores and media ads have been touting the benefits of these compounds for arthritis. Glucosamine and chondroitin sulfate are naturally occurring substances found in normal cartilage. Glucosamine appears to be the biologically active component since chondroitin sulfate is merely composed of modified repeating units of glucosamine. Most interest has been directed at glucosamine.

Animal studies have suggested that glucosamine might slow cartilage breakdown by stimulating the synthesis of cartilage components and inhibiting the production of cartilage-damaging chemicals. Since osteoarthritis is caused by the breakdown of cartilage (which we are incapable of rebuilding), it is hoped that glucosamine might retard the progression of osteoarthritic pain and damage.

Several uncontrolled trials in humans have suggested improvement in symptoms and even a reduction in X-ray changes, but these trials have been small and short term. The NIH is currently launching a multicenter controlled double-blind study to definitely assess the efficacy of both glucosamine and chondroitin sulfate.

While we await the results, there are several things to remember. Glucosamine has only been considered for osteoarthritis and would not be expected to have any benefit in inflammatory arthritides such as Rheumatoid Arthritis. Even more important is the fact that it is considered a dietary supplement and not a drug. Therefore, its production is not regulated or overseen by the Food and Drug Administration and there is no protection from impurity or any guarantee of potency. As such, you can never be sure what is in any given pill. Until studies have proven its efficacy and its production has been regulated, glucosamine should be approached, at best, with caution.

Q. Is it important for me to have a follow-up evaluation of my osteoporosis on the same exact bone densitometry machine or may I use other densitometry machines?

A. It is best to stay wedded to the initial densitometer for the following reasons:

1. There are differences in technique and bone density measurements from one manufacturer to the other. For instance, the Hologic densitometers, over time, report greater levels of osteopenia/osteoporosis than the Lunar models.
2. Having a technician that has performed the procedure year after year on the same patient is very important, as is positioning.
3. It is also advisable that the densitometry studies be performed at facilities that interpret the densitometry report using all parameters (both T score and Z score) and evaluate the patient's reporting numbers with historical data. Some sites report electronically without knowing the patient's history. The Osteoporosis Assessment Centers have performed literally thousands of studies. These studies are read by physicians who are experts in osteoporosis and understand bone densitometry.

Q. What is the T score on a Bone Density Test?

A. A T score compares the patient in question to a cohort of young-adults aged 20-40. This is the basis for developing the number that determines whether a patient is normal, osteopenic or osteoporotic. Less than 1.0 standard deviation below the mean equals normal. One standard deviation to 2.5 deviations below the mean for the young-adult reference population is considered osteopenic (low bone density). Greater than 2.5 standard deviations below the mean is considered osteoporotic which is associated with a high risk of bone fractures.

Q. What is the Z score on a Bone Density Test?

A. The Z score compares the age-matched reference population (this is the most important in the studies of children). If it is abnormal in an adult, then the possibility of a secondary cause for osteoporosis should be investigated. Physicians at Arthritis and Rheumatism Associates are well versed in the diagnosis and treatment of secondary causes of osteoporosis.

Q. Are all calcium supplements alike?

A. Claims for superiority of calcium supplements appear in a variety of media ads. Is one truly superior to another? The answer is no; they're just different. All are effective in the prevention and treatment of osteoporosis.

see **ANSWER** *continued on page 6*

CLINICAL TRIALS - SUMMER OF 2000

Herbert S.B. Baraf, MD

The Center for Rheumatology and Bone Research has continued to distinguish itself as a premier facility in the areas of rheumatology and osteoporosis research. This year, the Center has significantly expanded the number of conditions under study. For the first time, we have the opportunity to participate in clinical trials for patients with fibromyalgia, ankylosing spondylitis and psoriatic arthritis. We have had our first experience in studying the effectiveness of a patch applied to the knee for patients with osteoarthritis and our first new osteoporosis trial in two years has just begun. As many of you know, this medical practice has participated in work that has led to therapeutic developments now known as the Biotechnology Revolution. Many new therapies are under investigation around the world and we have had a chance to play a significant role. There is still much work to be done. In excess of 100 new potential therapies for arthritis are under investigation. Combined, our Maryland and D.C. offices are currently actively involved in more than 40 projects!

We encourage our patients to participate in clinical trials, if interested. Sometimes it is simply for the experience and other times it is an attempt to find a solution where conventional therapy has failed. Whatever the reason you might have to participate, you can be assured that a top-flight group of dedicated clinical research professionals will guide you through the process and assist in the evaluations. There is no cost involved in participating. Investigational drugs are provided free of charge. Office visits, x-rays, laboratory testing and other procedures are paid for by the sponsors of these programs, some of which may be for a few days, a few weeks, or a few years.

For patients interested in participating in clinical research we have a number of actively enrolling and anticipated new protocols:

RHEUMATOID ARTHRITIS (RA): We are engaged in the evaluation of four new Disease Modifying Anti-Rheumatic Drugs (DMARDS) for patients at various stages of their Rheumatoid Arthritis. (Maryland & D.C.)

Evaluation of a new anti-inflammatory agent which is a Selective Cox-2 Inhibitor (similar to Vioxx and Celebrex) is under way at the D.C. office.

OSTEOPOROSIS: A new trial of a medication to control the progression of osteoporosis and prevent hip and vertebral fractures has just started to enroll in the Wheaton office. Free screening for osteoporosis will be available for post-menopausal women interested in being evaluated for this study.

OSTEOARTHRITIS OF THE KNEES OR HIP: We have a number of different programs that are actively enrolling. In addition to a number of studies of anti-inflammatory and pain relieving medicines, this spring we began a program to study the cartilage-stabilizing effect of a drug currently used to treat osteoporosis. It is hoped that this treatment will prevent osteoarthritis from progressing.

A patch containing anti-inflammatory medicine for osteoarthritis of the knee is under evaluation in our Maryland offices.

LOW BACK PAIN: One program in D.C is currently evaluating medication to control pain due to chronic backache.

FIBROMYALGIA: We are conducting our first clinical trial evaluating a treatment for this condition. The program is being conducted in the D.C. office.

ANKYLOSING SPONDYLITIS: We feel fortunate to have had both of our research sites selected to conduct a trial of a new Selective Cox-2 anti-inflammatory agent as a treatment for this condition. Fewer than twelve sites in North America will participate in this project. (Maryland & DC)

PSORIATIC ARTHRITIS: Enbrel, released 18 months ago for Rheumatoid Arthritis, is being studied in a national multi-center trial for Psoriatic Arthritis. This trial will be conducted in our Wheaton office and requires patients to have at least one patch of psoriasis and three tender and swollen joints.

In all of these programs diagnostic testing, medication and physician visits are ***free*** of charge. We would be delighted to review the specifics of these trials with you. Please feel free to discuss these programs with your physician on your next visit to the office. If you know someone who is not a patient of our practice who might be interested in learning more about our research center, please refer him or her to our study staff at 301-942-6610 for additional details concerning both Maryland and D.C. programs.

If you would like to be included in our clinical trials database please fill out the enclosed questionnaire.

SEE CLINICAL TRIALS QUESTIONNAIRE ON REVERSE SIDE

FUN RHEUM **by Evan L. Siegel, MD**

Rheumors Wordfind

U	V	L	C	A	N	A	H	E	E	I	M	J	H	K
P	W	Q	N	Q	R	Q	S	N	X	V	R	X	Q	C
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S	O	H	T	Q	V	A	O	Y	X	O	F	K	E	L
E	U	I	Z	G	S	C	T	K	N	K	Q	W	R	X

ARTHRITIS
ASPIRIN
EXERCISE
HIP
JOINT
MEDICINE
OSTEOPOROSIS
PAIN
STIFFNESS
SWOLLEN

CLINICAL TRIALS QUESTIONNAIRE

If you or someone you know would like to learn more about our clinical trials program, call our study department at **(301) 942-6610** or return this form to:

The Center for Rheumatology and Bone Research
2730 University Blvd. West, Suite 306, Wheaton, MD 20902

I am interested in learning more about participating in a clinical trial.

Name: _____ Phone #:_____

Address: _____ Best time to reach you:_____

_____ Your Physician_____

Diagnosis and/or symptoms?_____

____Check here if you are interested in receiving a free pamphlet on clinical trials.

NEW NIH *continued from page 1*

of prior fracture. Secondary osteoporosis may be seen in association with multiple other medical problems and medications. Among men, 30 to 60 percent of osteoporosis is associated with secondary causes. In perimenopausal women, more than 50% of osteoporosis is associated with secondary problems. Glucocortocoid (steroid) use is the most common form of drug induced osteoporosis. Prednisone in a dose of 5mg or more for more than two months increases the risk of bone loss.

Adequate calcium and Vitamin D intake are crucial to develop optimal PBM throughout life. Those not achieving recommended dietary intake should have adequate supplementation of calcium and Vitamin D. Only 10% of girls and 25% of boys ages 9 to 17 and 50% of older adults meet the current calcium recommendations. Regular exercise, especially resistance and impact activities, contributes to development of high peak bone mass and may reduce falls in older individuals. Exercise late in life (even to age 90) may reduce the risk of falls by 25%.

Fracture prevention is the primary goal in the diagnosis and treatment of patients with osteoporosis. Assessment of bone mass with DXA (Dual Energy X-ray Absorptiometry) testing, identification of fracture risk and determination of who should be treated are the optimal goals for evaluation of patients with osteoporosis. Other methods of Bone Mineral Density (BMD) determination such as quantitative ultrasound (QUS) provide information about fracture risk, but it is uncertain how to apply these results to diagnosis and therapy of osteoporosis.

Several treatments have been shown to reduce the risk of osteoporotic fractures. The bisphosphonates alendronate (Fosomax), risedronate (Actonel), and etidronate (Didronel) reduce the incidence of vertebral fractures by 30-50%. Alendronate and risedronate also reduce the risk of subsequent non-vertebral fractures. Salmon calcitonin has demonstrated positive effects at the lumbar spine. Raloxifene is a selective estrogen receptor modulator (SERM) that has a positive estrogen-like effect on bone, but avoids the deleterious effects of estrogen on the breast and uterus.

All adults with vertebral, hip, or wrist fractures should be evaluated for osteoporosis, but currently fewer than 5% of patients with osteoporotic fractures are referred for osteoporosis evaluation and treatment. Painful vertebral fractures have been recently treated with vertebroplasty and kyphoplasty which involve the injection of bone cement into the fractured vertebra.

The conference panel recommended that future research address the following issues: maximizing peak bone mass, the role of genetic factors, mechanisms of steroid induced osteoporosis, secondary osteoporosis, gender, age, and ethnically specific data to determine fracture risk, quality of life issues, the role of depression and eating disorders, combination therapy, optimal evaluation and management of fractures, and education and cost effectiveness of osteoporosis programs.

A final version of the report will be released after further revision. The draft version is available on the Internet at: <www.consensus.nih.gov>.

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November, 2000, given by the Chapter for distinguished accomplishment in the field of medicine.

On a personal note, Dr. Barth will be celebrating his fortieth wedding anniversary this year. Judith Barth, a registered nurse who specializes in anxiety and phobia disorders, and Werner have three children, Richard, an orthopedic surgeon in Washington, DC, Todd, an attorney in Houston, TX, and Jackie, a business woman in Hong Kong. In his spare time, Dr. Barth enjoys tennis, golf and is an avid reader. He is also a proud grandfather of six children, ages four to eight.

We welcome Dr. Barth to ARA where he will see patients at our 2021 K Street office three days a week, beginning July 3, 2000.

RHEUMORS

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ANSWER *continued from page 2*

Calcium supplements are available in a variety of salts. Calcium carbonate and calcium citrate (Citracal) being the most common. Calcium phosphate (Posture), calcium lactate and calcium gluconate are other options. Most over the counter calcium preparations are calcium carbonate including brands such as Caltrate, Oscal, Tums and Viactiv. Calcium carbonate and calcium phosphate tend to be the least expensive.

Calcium absorption is incomplete with only about 20%-30% being absorbed. Taking calcium in doses of 500 mg or less increases absorption. Calcium citrate is usually absorbed in higher amounts than calcium carbonate that is why a tablet of Citracal (calcium citrate) has 315 mg, while calcium carbonate supplements come in 500 or 600 mg tablets. The average American diet consumes 400 to 800 mg of calcium per day. The National Osteoporosis Foundation recommends an intake of 800 mg/day for children 1 to 10 years old, 1200 mg/day for children 11 to 24 years old, pregnant and lactating women, 1000 mg/day for adults, 1500 mg/day for postmenopausal women not on estrogen replacement or patients over the age of 65. In addition, increasing Vitamin D intake may enhance calcium absorption both from dietary sources and supplements. The recommended daily intake for adults less than 50 years of age is 200 IU, for those 51 to 70 years of age, 400 IU, and for those over the age of 70, 800 IU.

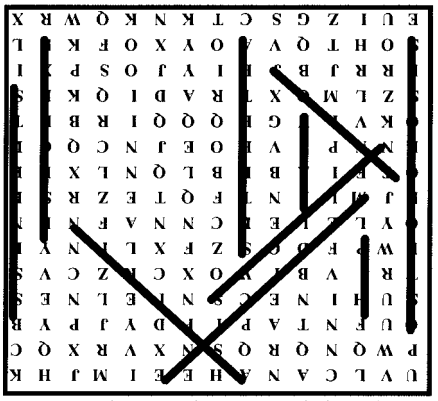
Calcium supplements are generally well tolerated. However, gastrointestinal complaints such as constipation, bloating and excessive gas are reported. Sometimes switching from one type of calcium to another may relieve symptoms.

Remember, people of all ages and sexes need an adequate intake of calcium. There is little evidence that any calcium supplement is more effective than any other in preventing osteoporotic fractures.❁

EDITOR'S NOTE:

The Vinegar Test for Absorption

To test whether the calcium supplement you select will disintegrate (break up) sufficiently for absorption, place it in six ounces of vinegar at room temperature for 30 minutes. Stir occasionally. If the tablet does not disintegrate within this time, it will probably not do so in your stomach. If your current calcium preparation fails this test, try switching to another brand.



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