Our Amazing Bones

At New Mexico Clinical Research & Osteoporosis Center, we spend a lot of time thinking about bones. In some ways, the skeleton is the most amazing organ of the body. After all, without a skeleton, we would all be jellyfish. And bones do more than provide a place to attach our muscles, allow us to walk, and protect our internal organs. Read on to get the inside scoop on bones.

Did you know that adult bones are in a lifelong state of removal and replacement? This is called bone remodeling or bone turnover. We are not aware of this happening because it occurs very slowly at a microscopic level, yet it is essential for survival. The remodeling of bones allows us to regulate the level of calcium in our blood, so that heart, muscles, and brain can function correctly. Without our bones doing this from minute to minute, these organs would stop functioning, with very bad consequences. Bone remodeling also repairs tiny “micro-fractures” that all of us develop every day, and allows us to replace old bone with healthy new bone. Here is an amazing fact: Our skeleton is entirely replaced about once every 10 years, all through the process of bone remodeling!

Bone is remodeled through the action of bone cells- osteoclasts, osteoblasts, and osteocytes. The cartoon below depicts osteoclasts (bone resorbing cells) as workers with jackhammers making holes in the bone. Osteoblasts (bone forming cells) are the bone repairmen filling the hole with new bone. Osteocytes are the cells that tell the other bone cells what to do and when to do it, represented here by the supervisors with clipboards. Osteoporosis medicines work by speeding up or slowing down the activity of these bone cells.

From Sergio Ragi-Eis, MD
Are you interested in participating in a research study?

Our clinical research program is recruiting patients to participate in studies to test new medications and evaluate new uses for currently available drugs. By participating in a study you will have the opportunity to use one of these medications, have free examinations and tests, and receive reimbursement for your time and travel. If this interests you, please take a few minutes to read the major criteria for participation.

If you think you may qualify for a study or are interested in participating in a research study, call a study specialist at (505) 923-3232.

Feel free to pass this newsletter to a friend or relative who may be interested. The drug study information is updated often, since we are continually starting new studies and closing existing studies. Call and give your information to a study specialist for consideration for future studies. If there is nothing for you now, there may be one soon.

Clinical Research

By participating in a clinical research study you play a more active role in your healthcare. Please call today to see what studies we have available 505-923-3232.

Current Available Studies Include

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Osteoporosis In Women

A clinical trial of an investigational medication for postmenopausal women with osteoporosis and are on currently on oral treatment. You may be eligible to participate if you:

- Are 60 years or older
- Have been on oral treatment for 3 years or longer

Loss of Strength and Muscle with Aging

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication to treat Sarcopenia (the degenerative loss of muscle mass). You may be eligible to participate if you:

- Are 70 years or older
- Have fatigue, osteoporosis, and low body weight associated with loss of muscle mass

Type 2 Diabetes Mellitus

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication to treat Type 2 Diabetes Mellitus and high blood pressure. You may be eligible to participate if you:

- Are 18 to 74 years of age
- Do not have good control over your blood sugar levels with your current regimen

Nerve Damage Caused by Diabetes

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication to treat diabetic neuropathy. You may be eligible to participate if you:

- Are 18 years or older
- Have Type 1 or 2 diabetes mellitus

Gout with Heart Problems

A research study comparing two approved medications for those diagnosed with gout, who also have cardiac risk such as diabetes, previous heart attack, or stroke. You may be eligible to participate if you are:

- Are between 45 and 85 years old
- Suffering from gout whether or not you are currently taking daily medication

Night Time Urination

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication to treat Nocturia (night time urination). You may be eligible to participate if you are:

- Are 50 years or older
- If you get up 2 or more times per night to urinate

All study-specific information is IRB approved. To learn more about any study, call 505.923.3232.
Should I Participate?

As a volunteer in a clinical research trial, you will not only take on an active role in your own health care, but you will also participate in the development of medical therapies that may offer better treatments and cures for diseases. Gaining access to new research treatments before they become publicly available in the marketplace could provide you with medical treatment that is otherwise not obtainable, ultimately improving the medical care you now receive. Whatever reason you chose to participate in clinical research, be assured that you are engaging in the advancement of medical treatments and potential cures for chronic or life-threatening diseases.

If you think you may qualify for a study or are interested in participating in a research study, call a study specialist at (505) 923-3232.

Clinical Research

Gout

This research study is to evaluate the safety and effectiveness of an investigational medication. We are screening patients who have experienced a gout flare within the last 12 months. You may be eligible to participate if you:
- Are 18 years or older
- Have a gout flare within the last 12 months

Gout with Kidney Disease

This research trial is to evaluate the safety and effectiveness of an investigational medication. We are currently recruiting patients who have gout and moderate kidney impairment. You may be eligible to participate if you:
- Are 18 years or older with moderate kidney impairment
- Have had a gout flare within the last 12 months

Osteoporosis with Spine Fractures

This is a clinical trial of 2 approved medications for women who have osteoporosis and a history of vertebral fracture(s). You may be eligible to participate:
- Are postmenopausal and 45 years or older
- Have had 2 moderate or 1 severe fracture of the spine

Osteoporosis In Men

This is a clinical trial of an open label medication for men with Osteoporosis. You may be eligible to participate, please call for more information regarding this study.

Stiffness in the Morning?

Do you suffer from osteoarthritis of the knee?

If so, you may be eligible to participate in a clinical research study being conducted now to evaluate an investigational medication to see if it can help relieve knee pain due to osteoarthritis.

If you or someone you know suffer from knee stiffness in the morning several days a month and are 35 to 85 years old call today.

Call 923-3232
Email: research@nmbonecare.com

All study-specific information is IRB approved. To learn more about any study, call 505.923.3232.
How are Participants Chosen for a Study?

All clinical trials have guidelines allowing or disallowing a person to qualify for participation. The criteria is based on age, gender, type of disease, previous treatment history, existing medical conditions, and any medications currently being taken. The criteria is used to identify appropriate individuals, ensure their safety during the trial, and provide the researchers with accurate data to answer the question under study.

If you think you may qualify for a study or are interested in participating in a research study, call a study specialist at (505) 923-3232.

Do you have Diabetes and High Blood Pressure?

You may be eligible to join a clinical trial for an investigational medication being evaluated for use in people with High Blood Pressure and Type 2 Diabetes.

Call 923-3232
Email: research@nmbonecare.com

Diabetes with Heart or Kidney Disease

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication for patients with Type 2 Diabetes and a history of heart problems or kidney impairment. You may be eligible to participate if you:
- Are 18 years or older
- Do not have control of your blood sugar levels with your current regimen

Type 2 Diabetes

This is a research trial to evaluate the safety and effectiveness of an investigational medication. We are recruiting patients with Type 2 Diabetes who have inadequate control with Metformin. You may be eligible to participate if you:
- Are 18 years or older and on Metformin
- Do not have control of your blood sugar levels with Metformin

Osteoarthritis of the Knee

This is a clinical trial to evaluate the safety and effectiveness of an investigational medication spray to treat knee pain. You may be eligible to participate if you:
- Are 35 to 85 years of age
- Have mild to severe osteoarthritis

All study-specific information is IRB approved. To learn more about any study, call 505.923.3232.
Woman to Woman
By
Julia Chavez, CNP

Remember the Water!

With summer approaching, it is important to stay well hydrated. Drink plenty of fluids. Water is the best way to stay hydrated, but it won’t hurt to have a little fruit juice or tea along with the water. Dehydration can lead to some very serious health problems including heat exhaustion and kidney stones. Dry climates including the southwest areas of the United States have a high percentage of people who develop kidney stones. People who don’t drink enough fluids can also experience leg cramps and headaches. Staying well hydrated will keep your skin moist and supple. If your tongue or lips become dry, you need to drink more water.

If you are experiencing any of the symptoms mentioned above and drinking more fluids isn’t helping, you need to contact your primary care provider.

If you enjoyed this newsletter and would like to be placed on an electronic mailing list, email ybrusuelas@nmbonecare.com.

Osteoporosis Foundation of New Mexico
Educational Presentations

Manzano Mesa Multigenerational Center
501 Elizabeth SE
Albuquerque, NM 87123
(505) 275-8731

1:30-3:00 PM

2014 Meetings

February 20, 2014
Dr. Keith Harvie
Topic: “Description of Pain with Osteoporosis”

May 8, 2014
Felipe Mares, PT, ATC
Topic: “Physical Therapy and Managing Osteoporosis”

August 14, 2014
Gloria Dryer
Topic: “Yoga for Osteoporosis”

November 13, 2014
Dr. E. Michael Lewiecki
Topic: “New Treatments in Osteoporosis”

These meetings are open to the public. It is a great opportunity to talk to osteoporosis experts for as long as you want. There is limited space, so please sign up by calling 275-8731 in order to attend. A $1 fee is collected in order to cover the cost of educational material. Consider attending if:

- You have osteoporosis,
- You have a loved one with osteoporosis, or
- You are interested in learning more about osteoporosis.

All study-specific information is IRB approved. To learn more about any study, call 505.923.3232.
Ask Dr. Mike Lewiecki about . . . OSTEOPOROSIS

Dear Dr. Lewiecki – This is not about me. It’s my older brother. He is 78 years old and recently broke his hip from a fall in his garden. He recovered pretty well from surgery but still needs a cane when he walks. I am worried that he might fall gain and break another bone. His doctor says not to worry, but he is my only family. Does he have osteoporosis? What should he do?
Rosie P., Los Lunas, NM.

Dear Rosie – You are right to be concerned. Your brother has osteoporosis, assuming a thorough medical evaluation does not find some other problem that weakens the bones.

Everyone over the age of 50 who has had a fracture, especially a hip fracture, should have a bone density test and be tested for problems that cause weak bones. Anything that is correctable should be corrected. For example, the vitamin D level could be low or there could be an intestinal problem interfering with the absorption of calcium. These sorts of problems need to be identified and treated. Something unexpected may turn up, such as multiple myeloma or hyperparathyroidism, that requires special treatment that is different than for osteoporosis. Once the medical evaluation is complete, medication can be given to make the bones stronger and less likely to break.

Another part of fracture prevention is preventing falls. Everything possible to improve muscle strength should be done. It is an unfortunate fact of life that we all lose muscle strength as we get older. A physical therapist can often help. Activities such as yoga and tai chi may improve balance. And don’t forget to make the home as safe as possible by removing tripping hazards, such as slippery throw rugs, electrical cords in the wrong places, using night lights, and adding grab bars in the right places.

There are now major efforts underway to do more to help people like your brother, starting in the hospital. See the column to the right for more about this.

From the editor: If you have a question for Dr. Lewiecki, please send it by mail to the address on the front page of this newsletter or by email to mllewiecki@nmbonecare.com. It is not possible to respond to all questions submitted, but those that are of general interest will be considered for publication with an answer in future issues of this newsletter.

FRACTURE LIAISON SERVICE

Have you ever heard of a fracture liaison service, or FLS? If you haven’t, you are not alone. But that may change soon, because this is a hot topic that is spreading around the country and the world.

FLS is a systematic way of identifying all patients over the age of 50 who enter the hospital with a fracture. A hospital employee, often a nurse, is the “liaison” who is responsible for talking to the patient and perhaps the family about the possibility of osteoporosis. It is an opportunity to discuss calcium and vitamin D, preventing falls, and avoiding risky behavior. A bone density test and lab tests can be ordered to find out more about the cause of weakened bones. Educational handouts can be provided.

After hospital discharge, the nurse liaison may contact the patient and family again. This might be to offer a reminder to complete any tests that still need to be done or to consider taking medication to reduce fracture risk.

You might ask, “Doesn’t the doctor already do all of these things? Why do we need FLS?” Unfortunately, we need FLS because most patients with a fracture who leave the hospital now are never told they might have osteoporosis and never treated to prevent the next fracture. Often there are too many other problems to manage and the bones are forgotten once the fracture heals. We can do better, and FLS can help.