



2639 New Pinery Road
Suite 2
Portage, WI 53901

(608) 742-9356 Phone
(608) 742-9358 Fax

NEW LIFE PHYSICAL THERAPY AND SPORTS MEDICINE

November 2005

The Ankle

Written by: Brian Doolan PT, CSCS



As basketball season is beginning, injury to the ankle will likely be a common occurrence. To treat the ankle, the anatomy and biomechanics of the ankle and lower extremity should be considered. The deltoid ligament on the medial side of the ankle is a wide and thick ligament. The deltoid's job is to stabilize during the loading phase of gait, or pronation of foot. On the lateral side of the ankle are three ligaments, anterior and posterior talofibular ligaments and the calcaneofibular ligament. These three ligaments are small thin ligaments that provide more proprioceptive feedback than structural stability. These lateral ligaments are far too often injured during an ankle sprain causing severe pain and disability.

The ankle does have a good defense against sprains. In addition to the ligament support, there are twelve muscles that cross the ankle and at least one other joint providing increased proprioceptive stability. The ankle muscles function very similar to a spring being pulled and released. The muscles are eccentrically loaded when the ankle starts to twist. The muscles then concentrically explode to keep the ankle from rolling over. This type of muscle activity is not isolated to the muscles that cross the ankle when the ankle starts to roll, but also muscles farther up the chain including the hips. To take advantage of the whole chain, the core muscles, the hip muscles, and the ankle muscles should be trained functionally to control the ankle.

To train the ankle functionally, the foot needs to be on the ground. By having the foot in contact with the ground, all the muscles that assist the ankle can be turned on to assist ankle control. Also,

the proprioceptive feedback the ankle receives in the upright position will prepare it for running, cutting, jumping, etc. Sitting on a chair moving resisted band back and forth often done in traditional rehabilitation for ankle sprains, does not give proprioceptive feedback similar to function. Also, it does not allow for training of the other synergistic muscles needed for ankle stability. Rehabilitation of the ankle requires the therapist to have a strong fundamental understanding of the dynamic biomechanics of not just the ankle, but the whole kinetic chain in order to safely return a person to full range of motion, dynamic stability, and safe return to all activities.

Sources:

Gary Gray, PT, Functional Video Digest Series, v2.10 Ankle Sprain Chain Reaction Rehab

Olmstead LC, Carcia CR, Hertel J, Shultz SJ, Efficacy of the star excursion balance tests in detecting reach deficits in subjects with chronic ankle instability. *Journal of Athletic Training* 2002; 37(4): 501-506.

Earl JE, Hertel J., Lower-extremity muscle activation during the star excursion balance tests. *J Sport Rehabil.* 2001; 10:93-104

" Thank you Matt for taking away the pain. I enjoy not taking high doses of pain medication"

Elaine Benson

" The gentleman that I worked with was a real pleasure to work with. He's very educated in his field; I think he did a world of good for me. He was able to answer any of my questions. He will be highly recommended by me."

Barbara Lacey

"Therapy made me 100% better. If I ever need therapy again, I will return. Thanks so much for all your help!"

Judy Carpenter

"Extremely professional staff & clinic. Very satisfied with the results!"

Grace Barden

"Thanks Brian for making my visits a pleasant and helpful experience."

Paul Lamoreux

"I am very happy I can now tie my shoes! May not sound like much but think about it!"

Lamonte Herpel

New Life Physical Therapy & Sports Medicine Hours

New Life Physical Therapy & Sports Medicine is conveniently located minutes off the interstate at:

2639 New Pinery Rd ~ Suite 2 Portage, WI 53901

** We're located right behind Jimmy John Sub Shop*

742-9356 phone 742-9358 fax

Monday through Thursday 7 AM to 6 PM

Friday 7 AM to 5 PM



We Would Like To Help Your Patients



Matthew Vanderkooi
PT, MS, OCS, COMT

Matt is the owner and one of the physical therapists of New Life Physical Therapy and Sports Medicine, Inc. He has been working with patients in the Portage area for the past 9 years. His certifications as an orthopedic clinical specialist and orthopedic manipulative therapist, grant Matt the ability to obtain maximum patient benefit from a minimum investment of time and resources.



Brian Doolan
MPT, CSCS

Brian graduated from UW Madison in 2002 with a Master of Physical Therapy degree. He also received his *Certified Strength and Conditioning Specialist* certificate. This allows his patients to return to full function via a complete whole body exercise program. Brian recently received his Level II Certificate for Orthopedic Manual Physical Therapy. Brian looks forward to using his knowledge to help your patients return to their normal lives.



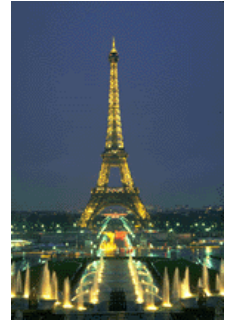
Matt Gibbons
MPT

Matt joined New Life in January 2005. Matt brings a unique blend of personal experience and exceptional physical therapy training to the team. His experiences in the Marine Corps. and as an agricultural and field service engineer give him excellent insight into industry and functional training. Matt has a Master of Physical Therapy degree from UW Madison. His desire to work with people and help them achieve a higher quality of life led him into the physical therapy field.

OUR MISSION

TO HELP OUR PATIENTS GET BACK TO THEIR LIVES BY RESTORING FUNCTION TO GOD'S MOST MAGNIFICENT CREATION, THE HUMAN BODY. WE WILL ACCOMPLISH THIS BY PROVIDING THE FOREMOST IN HANDS ON, INDIVIDUALLY FOCUSED, AND SCIENTIFICALLY BASED PHYSICAL THERAPY SERVICES.

Inside Story Headline



Caption describing picture or graphic.

Inside Story Headline

This story can fit 100-150 words.

The subject matter that appears in newsletters is virtually endless. You can include stories that focus on current technologies or innovations in your field.

You may also want to note business or economic trends, or make predictions for your

customers or clients.

If the newsletter is distributed internally, you might comment upon new procedures or improvements to the business. Sales figures or earnings will show how your business is growing.

Some newsletters include a column that is updated every issue, for instance, an advice

column, a book review, a letter from the president, or an editorial. You can also profile new employees or top customers or vendors.

“TO CATCH THE

READER'S
ATTENTION,
PLACE AN
INTERESTING
SENTENCE OR
QUOTE FROM
THE STORY
HERE.”

Inside Story Headline

This story can fit 75-125 words.

Selecting pictures or graphics is an important part of adding content to your newsletter.

Think about your article and ask yourself if the picture supports or enhances the message you're trying to

convey. Avoid selecting images that appear to be out of context.

Microsoft Publisher includes thousands of clip art images from which you can choose and import into your newsletter. There are also several tools you can use to draw shapes and symbols.

Once you have chosen an image, place it close to the article. Be sure to place the caption of the image near the image.



Caption describing picture or graphic.

Your business tag line here.

NEW LIFE PHYSICAL THERAPY AND SPORTS MEDICINE, INC.

Primary Business Address
Your Address Line 2
Your Address Line 3
Your Address Line 4
Phone: 555-555-5555
Fax: 555-555-5555
E-mail: someone@example.com

This would be a good place to insert a short paragraph about your organization. It might include the purpose of the organization, its mission, founding date, and a brief history. You could also include a brief list of the types of products, services, or programs your organization offers, the geographic area covered (for example, western U.S. or European markets), and a profile of the types of customers or members served.

It would also be useful to include a contact name for readers who want more information about the organization.

We're on the Web!
example.microsoft
.com

Back Page Story Headline

This story can fit 175-225 words.

If your newsletter is folded and mailed, this story will appear on the back. So, it's a good idea to make it easy to read at a glance.

A question and answer session is a good way to quickly capture the attention of readers. You can either compile questions that you've received since the last edition or you can summarize some generic questions that are frequently asked about your organization.

A listing of names and titles of managers in your organi-

zation is a good way to give your newsletter a personal touch. If your organization is small, you may want to list the names of all employees.

If you have any prices of standard products or services, you can include a listing of those here. You may want to refer your readers to any other forms of communication that you've created for your organization.

You can also use this space to remind readers to mark their calendars for a regular event, such as a breakfast meeting for vendors every third Tuesday of the month, or a biannual charity auction.

If space is available, this is a good place to insert a clip art image or some other graphic.



Caption describing picture or graphic.