

Vienna Chiropractic Associates, P.C.

News

May–August 2009



Why So High, Doc?

You have a pain in your low back, yet your doctor of chiropractic seems intent on working with your neck. What's going on?

Well, take a deep breath, because one explanation has to do with your primary breathing muscle—the diaphragm. The presence of this muscle proves that you belong to a highly advanced group of life forms—the mammals. Frogs, turtles and turkeys have to learn to breathe without it.

“Diaphragm” is Greek for “partition”—an apt name for a muscle that forms a partition between the chest and abdomen. It starts out much higher, though—in tissues found in the neck of the three- to four-week embryo. As this tissue descends, it drags its cervical nerve supply along with it. The adult diaphragm attaches to the lower rib cage and the first three lumbar vertebrae, giving it a profound influence over the lower back.¹ This is one reason that misalignments or restrictions (subluxations) of the cervical vertebrae create problems with your low back as well as your ability to take a deep breath.

Another link between your neck and low back has to do with one of your shoulder muscles. The nerves controlling the latissimus dorsi muscles (or “lats” as they are popularly known) originate from the same embryonic tissue as the nerves controlling the diaphragm. The embryonic nerve tissue destined for the lats soon veers off to the left and right limb buds that will eventually form into arms.

Once development is complete, the latissimus dorsi attaches to the upper arm bone (humerus) and to connective tissue

in the lower back. When it contracts, it helps pull the upper limb back and close to the body. In non-human animals, it can be a digging muscle (in certain moles and anteaters), a flying muscle (in birds and bats), or a walking and running muscle (in horses, dogs and cats).² In humans, it is an important swimming and climbing muscle. It also coordinates shoulder action during deep breathing.^{3,4}

The structure and function of the latissimus dorsi muscle is another reason

that the doctor of chiropractic will often examine the cervical spine of a low back pain patient. Sometimes, the shoulder will have to be worked with as well. The lats also help explain why some whiplash patients experience neck and shoulder pain at first, but later complain of low back pain. Chiropractic care for these problems often helps the patient breathe easier at the same time that pain is relieved.

The lat and diaphragm influences are only two of the many mechanisms by which the neck and low back influence each other. Anatomical relationships

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Office Hours

| | | | |
|---------------|--------------------------------------|-------------------|---|
| Monday | 10:30 am–1:00 pm; 3:00 pm–7:30 pm | barring emergency | |
| Tuesday | 3:00 pm–7:30 pm | Friday | 8:30 am–1:00 pm; 3:00 pm–6:30 pm |
| Wednesday .. | 10:30 am–1:00 pm; 3:00 pm–7:30 pm | Saturday ... | 9:00 am–1:00 pm (at least two Saturdays/month) |
| Thursday | No patient hours, | Sunday | Office closed |

For appointments, please call 703-938-6441. If we are closed or away from the desk, please leave a message. Your call will be returned as soon as practicable. Vienna is sometimes unkind to cell phone transmission. If you call us on your cell and can't get through, please try again!

Office Calendar

May

2, 16, 30... open, Saturday hours
18..... Chiropractic Ind. Day
25..... Memorial Day, closed

June

13, 20 open, Saturday hours
15..... Chiropractic Ind. Day

July

11, 18 open, Saturday hours
20..... Chiropractic Ind. Day

Note: We make every effort to provide you with an accurate calendar. However, each newsletter covers a period of four months (with five on the calendar to aid in planning) and unforeseen circumstances during this time period may require minor changes in this calendar.

August

1, 15 open, Saturday hours
17..... Chiropractic Ind. Day

September

7..... closed for Labor Day
12, 26 open, Saturday hours
21..... Chiropractic Ind. Day
28..... Yom Kippur, office closed

ANATOMY LESSON: The Rotator Cuff

We hear a lot about rotator cuff problems, especially as we head into baseball season (!). What exactly is this structure and why is it important? How can I care for my rotator cuff?

No other body part has the range of motion available to your shoulder. This is due to its unique construction. A human shoulder consists of three bones (humerus, clavicle and scapula) which come together to form a very shallow joint that most closely resembles an artichoke heart on a stick! (See our newsletter of January through April of '02.) In order to stabilize this joint while still taking advantage of its unique construction for range of motion, we have developed the rotator cuff. This consists of four muscles that hold the scapula and humerus together with their tendons, creating the actual cuff or labrum. These are the supraspinatus, infraspinatus, teres minor and subscapularis muscles, which are further supported by the deltoid and teres major muscles. These are not part of the cuff itself, but help strengthen and stabilize it. Feel free to ask for illustrations in the office.

Major nerve transmission to the cuff muscles and their supporters comes primarily from the fifth and sixth cervical spinal nerves (C5 and C6), in the middle of your neck. Often, what feels like a rotator cuff problem has its true origination in a vertebral subluxation complex involving this area. Since the C5 vertebra is usually the keystone in the arch of your neck, problems here, including poor posture, can create shoulder pain and problems.

Shoulder problems, including rotator cuff malfunctions, can present symptomatically as pain, stiffness, decreased

range of motion or weakness and may come from overuse, impingement (a trapping of a tendon) or tearing, as well as displacement of the bones of the shoulder, or less than optimal function of specific nerves.

We often hear of tears in the cuff. While a healthy rotator cuff is very hard to tear, we often experience some decreased circulation, fraying or frank small tears in the rotator cuff as we age. A cuff with these problems may remain, for the most part, asymptomatic, but lifting suitcases, children or pets or frank trauma, such as a fall, can tear the cuff. Other localized problems can arise with overhead activities such as a hard overhead serve, painting ceilings or high walls, pitching or certain swimming strokes.

If you are having problems with a shoulder, we urge you to come in and catch it early so that it doesn't become arthritic or form adhesions from constant inflammation. The first thing we will

check for is a problem originating from your neck or upper back. We will look at the shoulder itself to see if the problem also has some local cause. Please remember to tell us about falls, sudden lifts or hard impacts in general, as well as prolonged use in an awkward position. We may ask you at some point to get the area x-rayed to rule out fracture. If x-rays are negative and difficulty persists, we will ask you to get an MRI or a neuromuscular ultrasound so we can see the actual cuff, since x-rays won't visualize soft tissue such as muscles and tendons. Depending on the findings, we may also refer you to an orthopedist for co-management of the problem. Please remember that everyone's problem and structure is a little different and all the above will be tailored to your specific situation.

We will also ask you to rest the area until we pinpoint the major injury. We may ask you to apply cold for relief. If a movement hurts, stop for now. At some point, depending on your exact problem, you may be given exercises to strengthen the area and help prevent "freezing." The more we know about the exact nature and location of the problem, the easier it is to make sure you are doing exercises appropriate for you. 🌿

Ah, Spring!

Crocuses and the promise of wearing our sandals lures the cave creatures out of their dens! We want to go outside, sometimes rousing the dogs from their sleep for early walks. We want to do it all! Considering how little most of us did during the cold, grey months, we just might want to be what in another time would have been called prudent. Pace yourselves, folks! Gradually lighten the wardrobe, dig up the garden in smaller increments of time until your body gets the idea. Choose more green products and maybe wear a mask if

you're tackling spring cleaning. Golfers, in your excitement (we know, if you're a real golfer, you were out there as long as there was no snow cover) don't forget good body usage, so you don't become an early greens disaster. That's the basic idea. Give yourself a week or two to remember good body usage, including posture, pay attention to dust, chemical and pollen sensitivities and work up to the activity levels at which you want to spend the warm seasons. Warm up and stretch. We're happy to work with you to avoid injury, we'll be here if you don't. Now, carefully, play ball! 🌿

CREATIVITY RESEARCH: A Call for Subjects

We're studying the effects of the chiropractic adjustment on creativity. To that end, we invite you to participate in our project.

WHO IS ELIGIBLE? You must be able to express yourself in spoken and written English for the purposes of the project. Spelling and grammar are not a concern for this experience. Children as young as nine years are also invited to participate as long as the above is accurate. There must be a parent or guardian in the office throughout their active participation. You do not have to be a patient at this office in order to participate; in fact, we urge you to spread the word as it is in everyone's best interest to collect a large amount of data. We have flyers available, which are designed for posting on bulletin boards or to be handed out.

WHAT WILL HAPPEN? This project utilizes a ten-minute pen and paper exercise drawn from previous creativity research. You will complete two versions of this exercise and then be adjusted. This will be a full chiropractic adjustment in which we analyze your spine and make the indicated corrections. You will then complete a third version of the ten-minute exercise.

HOW MUCH TIME SHOULD I BUDGET? If you are currently a patient at our office, plan on scheduling one hour for your "research appointment." Please make sure Lisa and Joanne are aware that you want to participate in the project on that day so that you can be adequately scheduled. If you have not been seen here before, please budget two hours.

We will also ask for permission to call you in two to three days to see if

you've noticed any changes in your handling of any real world creative task(s) with which you are currently involved.

WHAT ARE YOU CALLING A CREATIVE TASK? Since creativity deals with coming up with new (to you or to the world at large) ways of seeing and communicating concepts from the mundane to the sublime, a myriad of activities falls under the description of creative tasks. These might include the classically creative fields of art (including quilting or garment design), literature, drama, dance and music, but it can also include gardening, coming up with a new marketing plan or new teaching/training exercise, renovating

a room or home, coming up with a new recipe (or whole party!) or finding a way to keep a home comfortable and well-maintained on a suddenly reduced budget.

All care on the day of participation will be delivered at no cost to the individual. This is a self-funded project, so we cannot offer you a cash payment for your participation, only our thanks! If you are interested in participating in this project, please call the office at: 703-938-6441 to set up an appointment. Thank you! 🐾

THANK YOU!

We'd like to take a moment to thank you for your referrals. We appreciate your confidence in our office and welcome the chance to deliver high quality care to your friends and family, as well as to yourselves.

FAQ

"Why is what chiropractors do called an adjustment?"

Chiropractic care consists of systematically observing and examining the patient (analysis) and then, through a variety of techniques, helping the spinal segments move correctly and freely. This is called an "adjustment." While sometimes a vertebra will be sitting inappropriately and "out of line," most of the time the problem is that the vertebra, which is meant to move freely within its normal range, is moving too much or too little so that it is irritating the structures around it, including the spinal nerves. This is called a vertebral subluxation complex. When this happens, the nerve delivers too much or too little information to the structures it informs and the result can be malfunction, from pain, to illness, to problems with related structures (and they are all related in some way within the individual!). This is why someone may have a moderate to severe scoliosis (abnormal curvature of the spine) and yet, through adjustment, without surgery, enjoy a high level of spinal health. Some offices, such as ours, also offer support for soft tissue integrity (muscles, tendons, etc) as a kind of fine-tuning. We also offer cranial analysis and adjustment. So, the short answer is, it is called an "adjustment" because we are adjusting movement and, in some cases, positioning at the segmental level in order to allow for more normal nerve transmission and therefore improved health.

What Is Chiropractic Independence Day?

In an effort to make chiropractic care affordable to everyone, we set aside selected Mondays as Chiropractic Independence Days. On Independence Days, there are no set fees. Your decision to seek care is independent of your insurance or income level. Payment (which goes anonymously into a box at the front counter) is a combination of what you feel the care is worth and your ability to pay. (Medicare is the one exception. We must charge you the federally-mandated fee.) We do accept new patients on Independence Days, depending on time availability, making this an excellent time to introduce a friend, co-worker or family member to chiropractic care. It does make sense to make your appointment well in advance as these time slots fill in quickly.

MULTIPACKS

If you want to have your spine checked regularly on an early intervention basis, you may be interested in our six- and twelve-visit packs, or the eighteen-visit family pack. You will save money while safeguarding your spinal health and mobility. Our staff is happy to answer your questions about these programs.

Achieving Goals (with a little help from your friends)

Often, our patients are grabbing a little time from home or work to deal with a newly blooming sciatica or a headache that doesn't appear to be leaving. Other times, they are working toward improved general wellness or higher achievement regarding a function, task or dream. Want a little help with yours?

We can help you set and work toward personally defined goals whether they involve better balance, more robust

health, running a marathon, honing a new skill or simply being able to work longer at a task such as gardening. Now that we are headed into warmer weather, many of us are suddenly asking more of our bodies and most of us find we can achieve more if we set ourselves to doing so. Sound good? Give us a call or request a little extra time during your next visit to discuss your project and begin making solid plans for it.

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such as these are clear reminders that "it's all connected." 🌱

References

1. Warwick, R., P.L. Williams. *Gray's Anatomy: 35th British Edition*. Pages 516-518. W.B. Saunders, Philadelphia, 1973.
2. Hildebrand, M. *Analysis of Vertebrate Structure: Fourth Edition*. Pages 491-495. John Wiley and Sons, New York, 1995.
3. Basmajian, J.V. *Muscles Alive*. Page 356. Williams and Wilkins, Baltimore, 1979.
4. Masarsky, C., M. Todres-Masarsky. *Breathing and the Vertebral Subluxation Complex*. In Masarsky C., M. Todres-Masarsky (Editors). *Somatovisceral Aspects of Chiropractic: An Evidence-Based Approach*. "Neurological Fitness," Vienna, VA, 2008.

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Address Correction Requested

