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# Get Healthy, Stay Healthy with Kinetic Health

Dr. Brian Abelson  
Dr. Evangelos Mylonas

403-241-3772  
kinetichealth@shaw.ca

## Upper Cross Syndrome (UCS)

By: Dr. Brian Abelson DC.

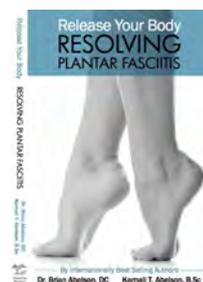
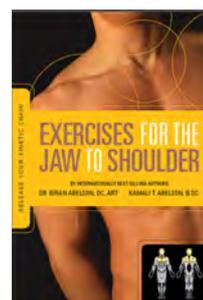
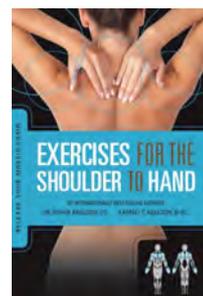
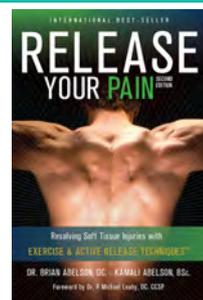


Upper Cross Syndrome (UCS) refers to a pattern of muscle imbalances in the head, neck, and shoulder regions. UCS causes headaches, neck and shoulder pain, postural stress, and even respiratory dysfunction. I first learned about UCS twenty plus years ago from a Czechoslovakian Neurologist by the name of Dr. Vladimir Janda. I consider myself very lucky to have taken courses with this expert in neurology and biomechanics.

The postural distortions caused by UCS are easy to recognize. The most obvious being rounded shoulders, and forward-head posture. If you look at a person with good posture from the side, you should be able to draw a line straight up through the middle

of their shoulder through their ear lobe. Most individuals with UCS will have a head position that is two to three inches ahead of this line.

UCS creates a pattern of both tight and weak muscles on opposite sides of the body. For example, when you keep your shoulders rolled forward, as most people do when working on a computer, your chest muscles (*pectoralis major/minor*) become very.... *Article continued on page*



## Back of the Knee Pain: The Baker's (Popliteal) Cyst

By: Dr. Evangelos Mylonas DC.



This year marked the 50<sup>th</sup> anniversary of the Calgary Scotiabank Marathon and once again, in true Kinetic Health fashion, Dr. Abelson and I were out video-blogging the entire race, from start to finish. This is our way of showing our support for all the runners (many of whom are our patients) and an opportunity to showcase the vibrant and scenic neighbourhoods that make up this dynamic city of ours.

As Canada's longest running marathon, the Calgary Scotiabank Marathon is a

world-class destination race and can be used as a qualifier for the Boston Marathon. 15,000 runners and walkers participated in this year's race and were cheered on by thousands of spectators as well as local artists, dancers, and musicians. Raising 1,150,000 dollars for ninety one charities through the Scotiabank Charity Challenge.

While we were out there cycling the course, we noticed that certain runners were demonstrating abnormal gait patterns, often as a result of knee pain. It is not uncommon for runners to suffer from knee injuries given the amount of training they perform and the distances they cover. .... *Article continued on page - 3*



50th Scotia Bank Calgary Marathon  
Check out our video on this great event,  
definitely the best year yet.

<http://youtu.be/yWixuyipQ7g>

Check out our latest  
publications at:  
[www.releaseyourbody.com](http://www.releaseyourbody.com)

## Upper Cross Syndrome (continued)

short and contracted (tight). This pulling forward of the shoulders creates considerable stress in the neck and at the base of the skull (tight *suboccipitals*, *upper trapezius*, and *levator scapulae* muscles). In fact if you can draw a straight line from your chest to the base of your skull, then you are demonstrating the upper cross pattern of tight muscles associated with UCS.

At the same time, if you can also draw a line from the front of the neck (*cervical flexors*) to your mid back (*Rhomboids and lower trapezius*), then this is also a sign of UCS. These muscles often become weak due to postural stresses, trigger points, and a neurological reflex call *reciprocal inhibition*.

From his research, Dr. Janda concluded that chronic muscle imbalances can be caused by several key factors, including certain neurological factors that are controlled by the central nervous system.

Janda hypothesized that tight muscles weaken oppositional muscles (their antagonists) through a process called **reciprocal inhibition**. For example, in order for the *bicep* muscle in the front of your arm to contract, the *triceps* muscle along the back of your arm must relax. If the *triceps* muscle is tight, it will inhibit or weakens the *bicep* muscle. This is an example of *reciprocal inhibition*. This means that weakness is in part a reflex-mediated process. Weakness in any muscle can be caused by increased tension in its antagonist or oppositional muscle.

This is great information because it tells us that if we want to make certain muscles strong, we will first have to release its oppositional muscle (if it is already tight and contracted). This also tells us that, performing strengthening exercise on a weak muscle (due to reciprocal inhibition) without concurrently releasing the oppositional muscle could actually make the weak muscle even weaker.

The UCS pattern of muscle imbalances also creates joint dysfunction. Some of the areas that are especially affected are at the base of the skull (*atlanto-occipital joint*), mid neck (*C4-C5*), and upper back (*T4-T5*). Changes in joint function become very evident with the many postural changes that take place in UCS, such as: increased forward head posture, changes in spinal curves (increased *cervical lordosis* and *thoracic kyphosis*), shoulders that are shrugged up and rolled forward, along with winging of the shoulder blade.

Bottom line, if we are going achieve long term success with resolving UCS, we will have to address **all** the affected areas, on both the anterior and posterior sides of the body. This is best achieved with a combination of soft-tissue therapy (Active Release, Fascial Manipulation), joint manipulation, and exercise.



### Upper Cross Syndrome

For more information watch the video we produced on "Upper Cross Syndrome".  
<http://youtu.be/TF2FRpRjW4Y>

The specific exercises we recommend to each patient will vary greatly depending on that individuals restrictions. But in general, it will require stretching, self myofascial release, and strengthening. Addressing only one component of this syndrome could actually make things worse. That is why it so important **not** to pick and choose from the recommended exercises, but instead do them all. The same applies to what is called "Lower Cross Syndrome" but that is a topic for another newsletter.

If you would like more information about this condition, or want to make an appointment please give us a call at **403-241-3772**.



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## Examples of Exercises for Upper Cross Syndrome



### Stretching your chest

<http://youtu.be/gj3XQE9rW0g>



### Myofascial Release of the Pectoral Muscles

<http://youtu.be/NhdcEs60No4>



### Myofascial Release of the Suboccipital Muscles

<http://youtu.be/z-EpR7UfAe0>



### Shoulder & Back Strengthening

<http://youtu.be/7Dbm60YrDY>

## The Baker's (Popliteal) Cyst (Continued)

Overuse injuries of the knee are one of the most common conditions that we treat at the clinic, but what may surprise many patients is that we also treat a significant number of runners that have been diagnosed with a Baker's (popliteal) Cyst. Quite often I will have patients ask me if there is anything we can do to treat a Baker's Cyst, and my answer to them is "yes".

### What is a Baker's (Popliteal) Cyst?

A Baker's Cyst (popliteal cyst), is a local swelling at the back of the knee that is typically caused by an injury or underlying condition that eventually leads to inflammation and fluid build-up within the knee joint.

### Causes

When the knee joint becomes inflamed because of an injury or underlying condition, synovial fluid accumulates within that joint. Too much fluid build-up can cause the joint capsule (a tough, fibrous capsule that encloses the entire knee joint) to bulge and the bursae (small fluid-filled sacs that act to cushion the joint and reduce friction between the bones and soft-tissues) to swell at the back of the knee, leading to the development of a Baker's cyst. Common causes of a Baker's Cyst include: Trauma, Knee Cartilage/Meniscus Injuries, Arthritis, Infection, Overuse Injuries.

### Treatment

The traditional medical approach to treating a Baker's cyst involves a period of watchful waiting and the use of anti-inflammatory medications to treat the pain and swelling. If a cyst remains painful and the swelling reoccurs, the cyst is usually drained. Sometimes in rare cases surgery is performed to remove chronically inflamed cysts completely.

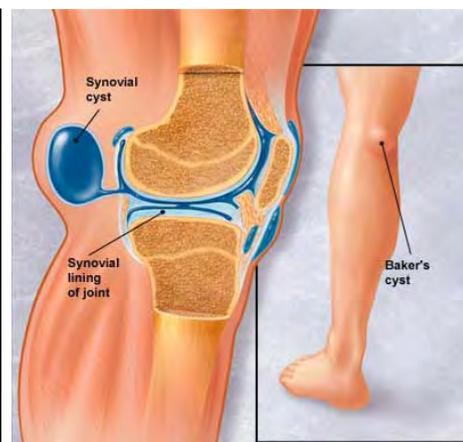
Our unique treatment approach at Kinetic Health differs in that we try to resolve the Baker's Cyst by treating the underlying cause of this condition. Ultimately, the cyst is a sign that there is a problem within the knee, and unless the actual cause is treated, the condition will not improve.

We first advise patients to R.I.C.E. (rest, ice, compression, and elevation) the affected knee during the first 48-72 hours of injury. Anti-inflammatory medication may also be used to reduce the pain and swelling associated with the inflammation during this acute stage, but should not be used once the initial symptoms subside since they may inhibit tissue regeneration and healing.

We then perform a thorough examination of, not only the knee, but of the entire kinetic chain above and below the problem area. For example, the hip abductors (*gluteus medius*, and *TFL*) need to be evaluated for any restrictions or weakness because they function to stabilize the entire leg. If there are any problems with the abductors, this can lead to increased stress and injury to the knee. When looking at the internal structures of the knee, such as the *menisci*, we need to evaluate the hamstrings (fibres of the *semimembranosus* muscle attach into the posterior horn of the *medial meniscus*) as well as the deep muscles at the back of the knee (fibres of the *Popliteus* muscle attach into the posterior horn of the *lateral meniscus*).

Any restrictions within these muscles have a direct impact on the *menisci*, and if a meniscus injury is causing the development of Baker's Cyst, the condition will not resolve unless these specific structures are treated. Another crucially important area that we also need to examine whenever there is any swelling in the leg is the inner thigh (*adductor*) region. Found within this area are the *adductor canal* and the *adductor hiatus* that function as channels or passageways between the muscles for the arteries, nerves, and veins that run from your groin down to your foot. Any restrictions in these areas can block drainage from the knee and lead to increased swelling.

As you can see there is more to a Baker's Cyst than simply the cyst itself. It is a complex, yet treatable condition if you properly identify the cause of the problem, and address all its key kinetic chain components. We have found that our treatment methods (ART, Graston, Fascial Manipulation, and Chiropractic) combined with appropriate rehabilitative exercises (stretching, strengthening, balance, and myofascial release) are highly successful in resolving most cases of Baker's Cyst as well as other types of knee injuries.



### Symptoms of a Baker's Cyst

A Baker's Cyst can cause minor knee discomfort and stiffness, but can also limit knee mobility and produce pain in other cases. Common symptoms associated with a Baker's Cyst are:

- Swelling located at the back of the knee.
- Stiffness and/or tightness when fully bending or straightening the knee.
- Sensation of pressure at the back of the knee that can travel down into the calf muscles.
- Knee pain.

### Complications

Most Baker's Cysts respond well to conservative care (therapy, rehabilitation, and anti-inflammatory strategies) and will usually resolve after a short time.

However, in rare cases, a cyst may continue to grow down into the calf muscles and may even rupture. This can result in sudden leg pain, redness, and swelling and carries a risk of forming a blood clot (thrombosis) in a vein of your leg. If you experience any of these symptoms, it is important to seek immediate medical attention.



### Photos of the 2014 Calgary Marathon

Check out the photos we took at this years Calgary Marathon.

<https://www.flickr.com/photos/kinetichealth/sets/72157644967963975/>

# Check out our informative websites, blogs, and YouTube channel...



## www.kinetichealth.ca

Welcome to our **Kinetic Health Clinic** website. Kinetic Health is located in northwest Calgary, in the community of Edgemont. Our information-rich site provides you with extensive healthcare information about the conditions we treat, our treatment methodologies, conditions we can help resolve, contact information, and information about our staff. You can also download **Admittance Forms** for Dr. Abelson, Dr. Mylonas, and our Registered Massage Therapists.

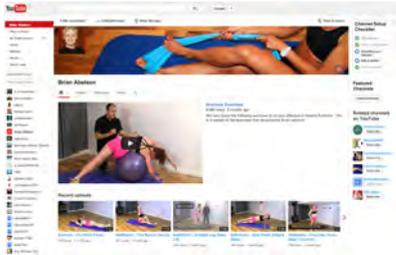
**Kinetic Health**  
Bay #10 - 34 Edgedale Dr. N.W.  
Calgary, AB, T3A-2R4

Phone: 403-241-3772  
Fax: 403-241-3846  
Email: [kinetichealth@shaw.ca](mailto:kinetichealth@shaw.ca)



## www.activerelase.ca

This popular site is dedicated to providing you with information about one of the most effective and popular treatment methods we use in our clinical practice - **Active Release Techniques (ART)**. We bring extensive expertise in ART. Dr. Abelson was an instructor in ART for over 10 years, has co-authored the international best-seller about ART, "**Release Your Pain**", and contributed to the **ART Biomechanics Manual** that is currently used to instruct ART practitioners. Both Dr. Abelson and Dr. Mylonas are fully certified in all ART techniques.



## www.youtube.com/kinetichealthonline

This is the link to our **YouTube** channel. We are constantly updating our channel with videos about new exercises, conditions, biomechanical analysis, local races (marathons, triathlon's), and even cultural events and travel. Please check us out, and feel free to *share* our videos with anyone that you think could use this information.



## www.releaseyourbody.com

**www.releaseyourbody.com** is where you can find and purchase all our latest publications. Our best selling books can be purchased in both **hard-copy** and **eBook** formats from this site. Get your copy of:

- Release Your Pain: 2nd Edition
- Exercises for the Shoulder to Hand: Release Your Kinetic Chain
- Exercises for the Jaw to Shoulder: Release Your Kinetic Chain
- A Quest for Healing - A Story of Love

## Local services, resources, and events we highly recommend.

**We have three excellent Registered Massage Therapists (RMT's) at Kinetic Health.**

Massage appointments are available Monday thru Saturday. Call 403-241-3772 to book your massage.



### Kinetic Health Supports Plan Canada

Plan Canada's goal is to provide children and their families with the essentials of life needed to be successful in their communities. <http://plancanada.ca>

### Calgary 70.3 Ironman July 27th

We will be there again this year to filming the Ironman 70.3 from start-to-finish. This event is really worth cheering for! Check out the video we took at last years event. <http://youtu.be/QmgpfyJDFAU>

