



TheElite Training Group track club

Expanding the area of what is possible

In Track & Field Distance Running & Competent Self-Care in medicine and psychology

back, neck, & frozen shoulder repair

A major part of TheETG mission is to expand the area of what is possible in competent self-care in medicine and psychology. TheETG's primary method of achieving that is to proliferate applied science based information by way of – free– packets containing plain language info for “the average joe” seeking to move themselves or others forward in these areas. The mail problem TheETG packets attempt to address.....

“...takes an average of 17 years to translate 14% of original research into benefit.....average of 9 years for interventions recommended as evidence-based practices to be fully adopted.”

M.Tinkle, et al
Dissemination and Implementation
Nursing Research and Practice...Volume 2013

Competent Self-Care: Medicine.....The best medicine comes with no risk-versus-benefit equations to contemplate, no daily violations of “first, do no harm”, no whac-a-mole medicine being practiced to medicate each health issue as it pops up. To be a good doctor one must -first- be a good physiologist. And in order to have a fully functioning health care system available to all human beings in America its core must be comprised of competent self-care and good physiologists.

Competent Self-Care: Psychology.....So-called “mental health professionals” should practice more mental health and less pharmacology. The goal of applied psychology is to empower people to achieve self-mastery. This should be the goal of competent self-care and all psychologists. Parenting....dysfunction moves from the parents, into the home, into the kids, into the streets, into the norm. Personal growth toward being a fully functional human being can move from the parents, into the home, into the kids, into the streets, into the norm.

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ETG Suggestions for Back, Neck, Shoulder Pain treatment

--- book.....Treat Your Own Back [by Robin Mckenzie]

<http://www.amazon.com/Treat-Your-Back-Robin-McKenzie/dp/0959774661>

--- find a McKenzie Method trained doctor or physical therapist in your area

<http://www.mckenziemdt.org/method.cfm>

--- Allan Besselink [McKenzie Diplomaed Physical Therapist]

<http://www.smartlifeinstitute.com/>

"The phenomenon of Lumbar Disc Herniation reabsorption is well recognized. Because its overall incidence is now 66.66% according to our results, conservative treatment may become the first choice of treatment....."

".....overall incidence of spontaneous resorption....66.66%...."

"The incidence in the United Kingdom was 82.94%..."

"The incidence in Japan was 62.58%"

**The quackery of Traditional --sports-- medicine:
Another example of what that looks like.**

back surgery -vs- no back surgery...

"To determine the performance-based outcomes in professional National Hockey League athletes with a lumbar disc herniation after either nonsurgical or surgical treatment."

"A total of 87 NHL players met the inclusion criteria; 31 underwent nonoperative care, 48 underwent a discectomy, and 8 underwent a single-level fusion."

"A comparison of the posttreatment results for the nonsurgical and surgical patient groups revealed no significant difference in performance measures."

G.D. Schroeder

**Performance-Based Outcomes After Nonoperative Treatment, Discectomy, and/or Fusion for a Lumbar Disc Herniation in National Hockey League Athletes
American Of Sports Medicine.....Volume 41 #11....November 2013...page 2604 - 2608**

**The quackery of Traditional --sports-- medicine:
Another example of what that looks like.**

achillies tendon surgery -vs- no achillies tendon surgery...

"A total of 100 patients [86 men, 14 women; mean age, 40 years] with an acute total Achilles tendon rupture were randomized to either surgical treatment, including an accelerated rehabilitation protocol, or nonsurgical treatment."

"There were no significant differences between the groups in terms of symptoms, physical activity level, or quality of life."

"There were 6 superficial infections in the surgically treated group.."

"The results of the present study demonstrate that stable surgical repair..this treatment was not significantly superior to nonsurgical treatment in terms of functional results, physical activity, or quality of life."

N.Olsson, et al

**Stable Surgical Repair With Accelerated Rehabilitation Versus Nonsurgical Treatment for Acute Achilles Tendon Ruptures
A Randomized Controlled Study
American Of Sports Medicine.....Volume 41 #12....December 2013...page 2604 - 2608**

Back, Neck, Shoulder: --The-- Treatment Program

As many as 80% of the U.S. population will have back pain at some point during a given year. Many athletes across many major sports suffer lowered performance and/or end-up leaving their sport after seeing doctor after doctor, "specialist" after "specialist", in an attempt to deal productively with chronic and/or re-occurring back pain.

Common Problems -----

Often, doctors are unaware that MRI's on people who have no back pain can look similar to the MRI's of people who do.....the point being that a lot of people have damaged looking disks (intervertebral disks) but have no pain or sport problems. Thus, certain tissues in the back, often get pointed out as the cause of the runner's pain, though such may not be the case. About 70% of people with back pain have no identifiable cause.

".....treatment selection is often determined by unsubstantiated theories of pain production and the educational dogma of the treating physician."

".....patients are routinely labled as suffering from such problems as muscle strain.....sacroiliac disorders....justified by negative or nonspecific findings on imaging studies (ie. X-ray or MRI). Few if any of these alternative diagnoses are based on validated clinical testing, yet they are widely used and accepted clinically."

Dr. Don Nelson.....1998

Journal Of Musculoskeletal Medicine....Volume 15 #5....1998...pages 29 - 39

Common Situations -----

On average, a person may go into flexion [bend-over] as many as 5000 times per day. People who have desk jobs may spend several hours each day in a flexed position. The tissues of the lower back adapt to these positions and motions over time. Tissues tighten or shorten over time. Disks in the neck or back get moved in one direction. In the absence of putting oneself in the opposite position/motion [back extension], problems can result that produce chronic and/or re-occurring back pain. People who have jobs that require getting into repetitive positions, computer workers with head jutted forward, auto mechanics bending over a car or looking up at the bottom of a car.....may spend a cumulative total of several hours each day in these positions. The tissues adapt to these positions and motions over time. Tissues tighten or shorten over time. Disks in the neck or back may get moved in one direction. In the absence of putting oneself in the opposite position/motion, problems can result that produce chronic and/or re-occurring pain.

One preventive measure is to do exercises that put you in the opposite position, or do repetitive motions in the opposite direction.

This is also a viable treatment for a problem that has developed over time.

Common Treatment Problems -----

The standard focus of traditional medicine is to do something "to" the runner with back pain. Either give a pill, cut something, remove something, or jerk something, apply heat, ice, and/or electrical stimulation, in an effort to relieve the pain symptoms. Generally, of the people who do absolutely nothing, about 40 - 45%% get better in one week. About 80 - 85% get better in one month whether they seek treatment or not. And about 90% get better in 2 months regardless of whether they seek treatment or not. So these time frames provide a standard by which to measure the results of various treatment protocols provided to the runner by doctors, chiropractors, or physical therapists. Obviously, if a person is receiving treatment, but isn't getting better by 8 weeks [2 months], the treatment is perhaps no better than the effects of nature.....though runners often assume that "the treatment worked" when their pain resolved after 3 months of therapy.

"I was convinced that many of my patients were getting better in spite of me rather than because of me."

".....Sooner or later, therapists will have to stop treating patients based on the blackboard or the X-ray and start seeing the validity of treatment based on proper mechanical evaluation."

G.J. Silva P.T.,Dip.MDT....199

McKenzie Institute Journal....Volume 6 #3.....1998

Patient Empowerment -----

Perhaps the most important problem to deal with in people with back/neck/shoulder pain, is the fact that it is highly likely that once resolved, the pain will return at some point in the future. Generally, back pain will re- occur in about 90% of people who get better. Thus, the focus on a short term solution, as is currently common in standard health care practice, is not the most effective solution. From a sport psychology standpoint, it is not the initial experience with back pain that leads athletes to leave their sport. It is the re-occurring experiences, placed together with repeated experiences of ineffective treatments, that gradually leads the athlete to frustration, burnout, and then withdrawal from sport.

MDT = Mechanical Diagnosis & Therapy -----

Mechanical Diagnosis & Therapy (MDT) is a manner by which a physical therapist, doctor, or chiropractor can use your own "mechanical" movements and pain perceptions to evaluate and develop a treatment for your back pain. MDT, developed many years ago by a physical therapist in New Zealand, Robin McKenzie, is --the-- most effective evaluation and treatment program available. MDT empowers the runner with the knowledge and tools necessary to play the primary role of healer of their own pain, rather than being dependent upon the medical practitioner or frequent and chronic doses of pain medications.

MDT effectively identifies people who need more extensive diagnostic exams (ie. MRI, etc) due to the nature of their problem. Rather than having to spend months going to physical therapy, and doctor after doctor, MDT is able to separate within a only a few visits, the people who will respond to treatment from those who will not.

The program is taught by the McKenzie Institute which has a branch in the United States. The Institute offers courses available to physical therapists, doctors, chiropractors, etc, through a series of four parts (Part A,B,C, and D). Practitioners who have completed all four parts are certified (cer.MDT), and certified practitioners can move on to an intensive three month diploma program (Dip.MDT). McKenzie certified clinics can now be found in the U.S., that focus their entire patient treatments on McKenzie methods.

"The McKenzie approach is a popular method of evaluation and treatment of neck pain."

" McKenzie advocates that there is a mechanical origin for most spinal disorders and so classifies spinal pain into three syndromes.."

S.R.Mercer, G.A.Jull

Morphology Of The Cervical Intervertebral Disc: Implications For McKenzie's Model Of The Disc Derangement Syndrome.

Manual Therapy...Volume 1, #2..1996..page 76 - 81

"At 7 weeks post onset of low back pain... the group receiving McKenzie treatment produced significant disability reduction compared with those treated with a NSAID."

A.P. Roberts;

The Conservative Treatment Of Low Back Pain..1990.

"Following introduction of a McKenzie trained therapist to manage hospital employees, days lost due to back pain fell by 52%, number of staff off due to back pain fell by 27%, and number of episodes of absenteeism due to back pain fell by 30%."

J.E. Owen, et. al

Very Early McKenzie Protocol Intervention For Back Pain In Hospital Workers.

JBJS..82B. Supp III,..2000,..page 212

A registry is maintained in the United States of both cer.MDT and Dip.MDT.

**To find a practitioner in your area <http://www.mckenziemdt.org/approach.cfm?section=int>
or call (800) 635-8380.**

In planning to pursue treatment by a McKenzie trained person, I strongly suggest seeing someone who has the ---diploma [Dip.MDT]--- rather than someone who is certified. The primary difference being that in seeing a ---Dip.MDT--- you're more likely to get with someone whose traditional belief system and ways of doing things has been removed from them. Beware of people who simply "claim" to use McKenzie, or patient testimonials who say McKenzie method was used on them by their therapist/doctor [find out if they saw a person who had the diploma...Dip.MDT].

If you'd like to get away from spinal fusion-implants and the people who recommend them, below are people/companies who can be contacted for information about the near future of disc regeneration surgery, within the context of the growing field of "Regenerative Medicine"

--- Jung U Yoo MD [Orthopaedic Surgery] University Hospitals of Cleveland and Case Western Reserve [216-844-8365]

--- MacroPore Biosurgery [858] 458-0900...www.macropore.com

--- David S. Bradford, M.D. [Department of Orthopaedic Surgery] University of California, San Francisco.. [415] 476-2280... www.spineuniverse.com/biography/bradford.html

Problems With Being Diagnosed Based On An MRI.....

"Asymptomatic" means, you have no symptoms, no pain, no problems.

An MRI showing damage to a knee meniscus, lower back disc, shoulder rotator cuff, etc may not mean what the doctor says it does. Is the damage you see on the MRI the actual cause/source of the pain. Faulty assumptions are the mother of all screw-ups.

The test = MRI magnetic resonance imaging

"Treat the patient, not the test".....

"26% true-positive results.....74% false-positive results"

"Of the 45 patients who did not undergo arthroscopic surgery, 6 had isolated anterior horn tears reported on magnetic resonance imaging, and 5 of the 6 were asymptomatic at follow up."

"...without clinical correlation, reliance on MRI to diagnose meniscal injuries could lead to unnecessary operations.....meniscal tears may be asymptomatic, and the presence of a tear does not necessarily account for a patient's symptoms."

M.F. Shepard, et al

**The Clinical Significance Of Anterior Horn Meniscal Tears Diagnosed On Magnetic Resonance Images
American Journal Of Sports Medicine.....Volume 30 #2...2002**

"Spinal magnetic resonance imaging often reveals alarming but clinically irrelevant findings, and adults with back pain who receive magnetic resonance imaging results may experience worse dysfunction than those not given the results."

"....."medicalizing" normal phenomena are as harmful as unrealistic expectations and are fostered frequently by marketing hype...."

Exploring the Harmful Effects of Health Care

C.M. Kilo, E.B. Larson

Journal Of The American Medical Association.....Volume 302 #1.....July 1, 2009.....page 89 - 91

"Some clinicians do lumbar imaging routinely or in the absence of historical or clinical features suggestive of serious low-back problems."

"We investigated immediate lumbar imaging versus usual clinical care....on clinical outcome...."

"Lumbar imaging for low-back pain without indications of serious underlying conditions does not improve clinical outcomes."

"Therefore, clinicians should refrain from routine, immediate lumbar imaging..."

R.Chou, et al

Imaging strategies for low-back pain: systematic review and meta-analysis

The Lancet....Volume 373 #9662....February 7, 2009....pages 463 - 472

"...several studies have shown that at least a third of asymptomatic people in their 20's have at least one degenerate lumbar disc."

A. Ong, et al

A Pilot Study The Prevalence Of Lumbar Disc Degeneration In Elite Athletes With Lower Back Pain At The Sydney 2000 Olympic Games

British Journal Of Sports Medicine....Volume 37...2003...page 263

"...evaluate the magnetic resonance imaging findings in both shoulders of asymptomatic....pitchers."

"...MRI....scans of rotator cuff tendons."

"Ten athletes....painless full range of motion."

"The labrum was abnormal in 79% of shoulders."

"...magnetic resonance imaging of the shoulder in asymptomatic....athletes reveals abnormalities that may encompass.....non-clinical findings."

"...studies of asymptomatic "average" volunteers have demonstrated that many signal changes can be present even when symptoms are absent."

A.Miniaci, et al

Magnetic Resonance Imaging Of The Shoulder In Asymptomatic Professional Baseball Pitchers

American Journal Of Sports Medicine.....Volume 30 #1.....2002.....66

"The incidence of rotator cuff tears has been reported to be as high as 39% in cadaveric and imaging studies, although many of these tears may be asymptomatic."

L.K.Y. Lo, et al

Matrix Metalloproteinase And Tissue Inhibitor Of Matrix Metalloproteinase mRNA Levels Are Specifically Altered In Torn Rotator Cuff Tendons

American Journal Of Sports Medicine.....Volume 32 #5.....2004.....page 1223



".....as many of us initially believe, 'I learned McKenzie in PT school'. Day one of Part A is forever etched in my mind as a ground-breaking moment in my clinical practice and thought process."

Allan Besselink P.T, Dip.MDT....1998

Editor Of McKenzie Institute USA Journal

"From 1996 to 1999, back pain and radiological changes in the thoraco-lumbar spine were investigated in 134 former top athletes....."

"This is a long-term follow-up investigation of a previous radiological study of the spine with clinical correlation. Despite significantly more radiological abnormalities among the athletes, they did not report higher frequency of back pain than the non-athletes. "

O .Lundin., M. Hellstrom, I. Nilsson, L. Sward

Back Pain And Radiological Changes In The Thoraco-Lumbar Spine Of Athletes: A Long-Term Follow-up

Scandinavian Journal of Medicine & Science in Sports.....Volume 11 #2.....April 2001.....pages 103 - 109

"Lumbar spine pain accounts for 5 to 8% of athletic injuries. Although back pain is not the most common injury, it is one of the most challenging for the sports physician to diagnose and treat."

"Often....a specific diagnosis cannot be made.....due to the lack of pain localization and the anatomic complexity of the lumbar spine. A thorough history and physical examination are usually more productive in determining a diagnosis and guiding treatment than imaging techniques."

"Strong analgesics are also usually contraindicated, except for sleep, since they mask pain and may allow over-vigorous activity. "

"....exercises include the Williams flexion exercises and/or McKenzie extension exercises. Both exercise motions may often be prescribed. Athletes with an acute disc herniation, however, should only perform extension exercises initially. Athletes with spondylolysis, spondylolisthesis and facet joint irritation should initially be limited to flexion exercises."

J.Harvey, S. Tanner...1991

Low Back Pain In Young Athletes: A Practical Approach.

Sports Medicine.....Volume 12 #6.....December 1991.....page 394-406

"Spinal magnetic resonance imaging often reveals alarming but clinically irrelevant findings, and adults with back pain who receive magnetic resonance imaging results may experience worse dysfunction than those not given the results."

"....."medicalizing" normal phenomena are as harmful as unrealistic expectations and are fostered frequently by marketing hype...."

C.M. Kilo, E.B. Larson

Exploring the Harmful Effects of Health Care

Journal Of The American Medical Association.....Volume 302 #1.....July 1, 2009.....page 89 - 91

"...elite athletes have a greater prevalence and greater degree of lumbar disc degeneration than the normal population."

"It has been noted that disc degeneration is significantly more common in elite athletes than in non-athletes [75% vs. 31%]."

"..at least a third of asymptomatic people in the 20's have at least one degenerate lumbar disc."

A.Ong, et al

A Pilot Study Of The Prevalence Of Lumbar Disc Degeneration In Elite Athletes With Lower Back Pain At The Sydney 2000 Olympic Games

British Journal Of Sports Medicine...Volume 37..2003..page 263 - 266

"Most cervical discs are morphologically abnormal, with outer annular tears found in both volunteers and patients."

K.P. Schellhas, et. al

Cervical Discogenic Pain: Prospective Correlation Of Magnetic Resonance Imaging And Discography In Asymptomatic Subjects And Pain Sufferers.

Spine...Volume 21 #3..February 1, 1996...page 300 - 311

Spinal Fusion surgery...Spinal Implant surgery

"The market for spinal implants and devices is estimated to be \$2 billion a year, with an annual growth rate of 18 to 20 percent."

"A recently added indication is so-called diskogenic pain, or low back pain without sciatica in patients with degenerative disks."

"This controversial diagnosis is often identified by provocative discography, itself a controversial procedure."

R.A.Deyo et al.

Spinal-Fusion Surgery ---- The Case For Restraint

New England Journal Of Medicine...Volume 350 #7..February 12, 2004...page 745

"Of the 65 million people in the United States with low back pain, approximately 151,000 undergo fusion of the lumbar spine each year."

S.J.Lipson

Spinal-Fusion Surgery --- Advances And Concerns

New England Journal Of Medicine...Volume 350 #7..February 12, 2004...page 643

"Spinal Fusion Surgery - The Case For Restraint"

"Wide geographic variations in use suggest a poor level of professional consensus.."

[in 1993 there were 150,000 spinal fusion surgeries, 300,000 in 2001]

"Several factors may be contributing to the rapid increase in spinal fusion surgery.the financial incentives for surgeons, hospitals, and the device industry..."

R.A.Deyo et al.

Spinal-Fusion Surgery ---- The Case For Restraint

New England Journal Of Medicine...Volume 350 #7..February 12, 2004...page 745

"Medicare spends an estimated \$750 million on spinal fusion each year."

S. Mendenhall editor and publisher

Orthopedic Network News Newsletter

"To compare the effectiveness of lumbar instrumented fusion with cognitive intervention and exercises in patients with chronic low back pain and disc degeneration."

" Sixty-four patients aged 25-60 years with low back pain lasting longer than 1 year and evidence of disc degeneration..were randomized to either lumbar fusion with posterior transpedicular screws and postoperative physiotherapy, or cognitive intervention and exercises."

"The cognitive intervention consisted of a lecture and a recommendation to use the back and bend it. This was reinforced by three daily physical exercise sessions for 3 weeks."

"At the 1-year follow-up visit, 97% of the patients..were examined. "

"The success rate according to an independent observer was 70% after surgery and 76% after cognitive intervention and exercises."

"The early complication rate in the surgical group was 18%."

"The main outcome measure showed equal improvement in patients with chronic low back pain and disc degeneration randomized to cognitive intervention and exercises, or lumbar fusion."

J. I. Brox.

**Randomized Clinical Trial Of Lumbar Instrumented Fusion And Cognitive Intervention And Exercises In Patients With Chronic Low Back Pain And Disc Degeneration
Spine...Volume 28 #17..September 1, 2003...page1913-21**

Spine Physician Update [quarterly publication of the American Association of Spine Physicians]

There is evidence of high complication rates associated with lumbar fusion, and a relative lack of evidence demonstrating the effectiveness of the procedure for degenerative spinal conditions.

A review of 6,376 records of patients who underwent lumbar surgery (1,041 of whom underwent spinal fusion) reported that 18% required re-operation during the five years after the procedure was performed, and that complications were most frequent among fusion patients."

These results emphasize the need to examine whether potential long-term outcomes outweigh the short-term risks and costs associated with spinal fusion procedures. Nonfusion surgical procedures (i.e. laminectomy or discectomy) or alternative, nonsurgical interventions may prove more effective.

A.D. Malter et al.

**5-year Reoperation Rates After Different Types Of Lumbar Spine Surgery
Spine...Volume 23 #7...March 1998..page 814 - 820**

**The O'Connor Report
Insights And Commentaries On Health Care Today**

In 1989, Dr. Richard Deyo, a professor at the University of Washington School of Medicine, directed a low back pain research study funded by the Agency for Health Care Policy and Research (AHCPR).

They looked at actual patient outcomes. By the early 1990's, his group found that one type of surgery for back pain-spinal fusion-was not well validated in its effectiveness. They also found that it actually resulted in higher complications and higher costs than other types of back surgery. This was not because the patients were older and sicker in the study-the patients were actually younger and healthier.

When his group published its findings and a related guideline was released in 1994, he and his colleagues were attacked. A national spine professional association lobbied Congress to eliminate the agency that funded the research and almost succeeded.

"It was unclear to us if anyone benefited from spinal fusion surgery except patients with spinal fractures or cancer," said Dr. Deyo. "At the same time this work was going on, the AHCPR created some guidelines on back pain with a panel of physicians that included neurosurgeons, orthopedic surgeons, rehabilitation doctors, internists, chiropractors and osteopaths, among others. When their recommendation was issued in 1994 after review of existing medical literature, the North American Spine Society began a letter writing campaign to Congress to cut the funding for AHCPR, Deyo said. "The Society had close ties to the companies that manufactured the screws and plates used in spinal surgery.

"The spine society had challenged our findings earlier saying our data were biased against surgery; that we were biased and bad researchers," he said. "And that our study was designed to reduce reimbursement for spinal fusion."

"Then when our guidelines were published, they really went after us and the AHCPR. A manufacturer of the plates and screws even tried to get a court injunction against publishing the guidelines."

Deyo also said that one the Board Members of the Spine Association started a non-profit organization-The Center for Patient Advocacy-advocating the elimination of AHCPR as well as seeking to curtail some activities of the FDA. "During this furor, it came out that the FDA had not really approved all the plates and screws for the particular uses where they were actually being used," he observed.

The AHCPR was eliminated by the House of Representatives, but restored by the Senate. The agency has been re-named to: Agency for Health Care Research and Quality. "But, to this day," says Deyo, "they have gotten out of the guideline publishing business entirely."

The Puget Sound Spine Interest Group was founded by a group of doctors in different medical specialties related to spinal care.

They were shocked when they started to meet to find that what one group of specialist took as a given, was completely unknown by the other professions.

One discipline-rehabilitation medicine-was taught non-surgical approaches for spinal care. Another group-orthopedic surgeons-was taught surgical solutions, often for the same condition.

Treatment often just depended on whom the patient was referred to by a primary care or other doctor.

**The O'Connor Report
Insights And Commentaries On Health Care Today**



Frozen Shoulder

Inability to raise your arm past shoulder level. May have pain at night when sleeping on the involved side.

This is not a "shoulder joint capsule" problem. There are no "adhesions" that must be resolved, no "adhesive capsulitis". Avoid injections of anything, especially cortisone. Avoid surgery of any kind. Get away from any medical practitioner who suggests either. The problem does -not- take the traditional 6 -24 months to resolve. It can be resolved much closer to 6 - 24 days.

Involves multiple issues, each of which will need to be reversed;

- disk[s] between cervical vertebrae pressing against a nerve that goes to the shoulder muscles
- forward extension of the neck
- protraction of shoulder girdle and tight shoulder rotator muscles
- tight shoulder internal rotation muscles

ETG Evidence Based Competent Self-Care Injury Repair -----

What To Do At The First Sign Of An Trouble with your shoulder.....

- Begin 7 days of daily intake of Vitamin C, Colstrum, Ribose, Vitamin D3, Aloe Juice, Probiotics, IMPACT Advanced Recovery [see ETG Nutrients for brand and dosage details].
- No slowing or suppressing the rate of tissue recovery and regeneration by taking anti-inflammatories, use of ice or ice baths, or getting cortisone shots.

Reversing The Problem

Motion Exercise 1 --- rear retraction of the neck [put fist on chin and push. Do relatively slowly for 30 seconds. Do 1 minute worth in the morning, and 1 minute worth in the evening everyday till problem resolves]

Motion Exercise 2 --- Look up [start with head level then rotate it backward to look up at the sky. Do relatively slowly for 30 seconds. Do 1 minute worth in the morning, and 1 minute worth in the evening everyday till problem resolves]

Motion Exercise 3 --- retraction of shoulder girdle [put hands out in front of you, pull shoulders back. Do relatively slowly for 30 seconds. Do 1 minute worth in the morning, and 1 minute worth in the evening everyday till problem resolves]

Motion Exercise 4 --- shoulder flexion [use 1 - 2 pound weights in your hands, arm by your side, swing it backward behind you slightly, then forcefully swing it up over your head using the momentum and weight to carry it through the area where you've lost strength, and as slowly as is possible for you lower it back down to the starting position. As you regain use of your arm, do the exercise more slowly until you can lift the weight without swinging it. Do 4 repetitions. Do this exercise once in the morning, and once in the evening everyday till problem resolves]

Stretch Exercise 1 --- stretch shoulder internal rotators use 1 - 2 pound weights [lie on your back with the weights in your hands preferably over your thumbs, hands by your side/legs/hips, on the floor, palms facing up. Hold position for 4 minutes, once in morning, once in evening everyday till problem resolves]

Stretch Exercise 2 --- stretch shoulder internal rotators use 1 - 2 pound weights [lie on your back with the weights in your hands, move arms above your head lowering the back of your hands to floor. Hold position for 4 minutes, once in morning, once in evening everyday till problem resolves]

Stretch Exercise 3 --- stretch shoulder internal rotators use 1 - 2 pound weights [lie on your back with the weights in your hands, move arms out so that your body forms a "T" shape. Now bend at the elbows putting the forearms straight up in the air. Now do a backwards rotation at the shoulder, lowering the back of your hands to floor. Hold position for 4 minutes, once in morning, once in evening everyday till problem resolves]

Strength Exercise 1 --- strengthen shoulder external rotators use 1 - 2 pound weight [lie on your side of the unaffected arm with the weight in the hand of the affected arm. Bend that arm at the elbow to around 90 degrees. With elbow and forearm locked in this position, elbow pressing against your body, perform a shoulder rotation motion, rotating the upper arm outward so that you're lifting the weight off the floor until the lower arm is past parallel with the floor. Do 4 repetitions. Do this exercise once in the morning, and once in the evening everyday till problem resolves]

Reminder....

This is not a "shoulder joint capsule" problem. There are no "adhesions" that must be resolved, no "adhesive capsulitis". Avoid injections of anything, especially cortisone. Avoid surgery of any kind. Get away from any medical practitioner who suggests either.

"...evaluate the magnetic resonance imaging findings in both shoulders of asymptomatic....pitchers."

"...MRI....scans of rotator cuff tendons."

"Ten athletes....painless full range of motion."

"The labrum was abnormal in 79% of shoulders."

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**Magnetic Resonance Imaging Of The Shoulder In Asymptomatic Professional Baseball Pitchers
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L.K.Y. Lo, et al

**Matrix Metaloproteinase And Tissue Inhibitor Of Matrix Metaloproteinase mRNA Levels Are Specifically Altered In Torn Rotator Cuff Tendons
American Journal Of Sports Medicine.....Volume 32 #5.....2004.....page 1223**

As we've known for several years, its -not- the knee injury or low blood supply to meniscus or ACL that prevents healing. Its -not- the injury that sends you down the road to osteo-arthritis.

Its the anti-inflammatories, its the ice, its the type of surgery you choose to have [ie. traditional knee surgery] that prevents healing and advances you down the road to osteo-arthritis.

And now we can add to the list, the type of anesthetic used during the surgery.....

"Recent basic science studies have demonstrated local anesthetic chondro-toxicity in vivo and in vitro in both human and animal cartilage. Clinically, chondrolysis associated with the use of intra-articular local anesthetic pain pumps has been described by several groups. This has raised concern regarding the clinical use of intra-articular local anesthetics."

"The authors undertook a review of the current orthopaedic literature on local anesthetic chondrotoxicity and its potential relationship to clinical chondrolysis."

"Local anesthetics such as bupivacaine, lidocaine, and ropivacaine are chondo-troxic to human articular cartilage in vitro, although ropivacaine is less so. The evidence suggests that there is a greater risk for chondrolysis with a longer exposure to a higher concentration of local anesthetic, such as with a pain pump, than with a single injection. However, late cellular and metabolic changes are seen after even a single injection of bupivacaine in animal models, and the loss of an intact cartilage matrix also leads to more extensive chondrocyte death. Some studies suggest that additives and the pH of the local anesthetic solution may also play a role in chondrotoxicity."

"Intra-articular local anesthetics should be used with caution, especially continuous infusions of bupivacaine and lidocaine at high concentrations in joints with compromised cartilage. The consequences of a single intra-articular injection of local anesthetic remains unclear and requires further investigation. Clinical Relevance: Intra-articular use of local anesthetics may have lasting detrimental effects on human articular cartilage and chondrocytes, although the clinical relationship between local anesthetic exposure and chondrolysis requires further study."

S.L. Piper, et al

Effects of Local Anesthetics on Articular Cartilage

American Journal Of Sports Medicine.....Volume 39 #10....October 2011....page 2245 - 2253

"Knee arthroscopy is one of the most common orthopaedic procedures performed in the United States. The publication of a randomized controlled trial of arthroscopy versus sham surgery by Moseley et al in 2002 showed no efficacy and challenged the role of arthroscopy for the treatment of osteoarthritis."

"The authors examined the American Board of Orthopaedic Surgery database that includes 6-month case logs for each examinee sitting for the Part II board examination for 1999 to 2009. Knee arthroscopy cases were identified by Current Procedural Terminology code and knee osteoarthritis diagnosis was defined by International Classification of Diseases, 9th Revision code. Piecewise linear regression was used to evaluate knee arthroscopy before and after the publication of the Moseley et al article in 2002."

"Knee arthroscopy for patients with osteoarthritis among orthopaedic surgeons during their ABOS examination case collection period has decreased after the publication of a highly publicized article demonstrating a lack of efficacy of this procedure. Further study is needed to determine if this change occurred in the orthopaedic community at large or if practice patterns only changed for surgeons during their board collection periods. Randomized controlled trials can be effective in changing orthopaedic surgeon practice."

A.Potts, et al

Practice Patterns for Arthroscopy of Osteoarthritis of the Knee in the United States

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"We evaluated the effect of cold ice-pack application following a brief sprint-interval training on the balance between anabolic mediators [growth hormone, insulin-like growth factor-I, testosterone], catabolic markers (cortisol, IGFBP-1, and circulating pro [Interlukin-6 and IL-1?]- and anti-inflammatory cytokines [IL-1 receptor antagonist]."

"Twelve males, elite junior handball players performed 4 × 250 m treadmill run, at 80% of each individual's maximal speed, followed by a rest period with and without local cold-pack application."

"Local cold-pack application was associated with significant decreases in IL-1?, IL-1ra, IGF-I, and IGFBP-3 and a greater increase of IGFBP-1 during recovery."

"Local ice therapy immediately following sprint-interval training was associated with greater decreases....anabolic hormones supporting some clinical evidence for possible negative effects on athletic performance."

D.Nemet, et al

Effect of local cold-pack application on systemic anabolic and inflammatory response to sprint-interval training: a prospective comparative trial

European Journal of Applied Physiology.....Volume 107 #4....November 2009.....page 411 - 417