# Joint cracking not always bad

By John Lubberdink Chiropractor

The art of joint manipulation is as old as the father of medicine. Even before Hippocrates, the Babylonians were practising the art of joint manipulation, in particular spinal manipulation.

Artifacts dating 5000 years ago show men utilizing various biomechanical levers to aid in the movement of the joint.

Exactly what is joint manipu-

lation? This rarely understood and often misquoted or misinterpreted maneuver involves a great deal of practice and understanding into the mechanisms of joint movement.

Often one is heard saying that the back is "cracked" or a bone is being put back into "place" as their interpretive understanding of the problem. These fallacies, misnomers, and in plain english "incorrect interpretations" as to

what is taking place gives the general public a poorly misunderstood concept.

To begin with, when a bone "goes out of place" what condition would you really be in if it happened to you?

Chances are you would be in extreme pain requiring surgical care (in most instances). When a bone is cracked is it really cracked or broken? When a manipulation is applied to a spinal joint is the resultant joint cracked? How often have you "cracked" your own spine when stretching without requiring immediate hospitalization?

Spinal and joint manipulation involves a vast complex of mechanisms that few really understand. We will try to explain this subject in simple terms.

When a joint seems to become restrictive or tighten down, either due to daily wear and tear or through acute trauma, there is a feeling of restriction, tightness, inability to flex, premature aging, the list goes on and on. How often have you felt the urge to have this region "popped, snapped, or cracked" back into place? Several researchers have

obtained scientific evidence as to what is taking place.

Two orthopedic surgeons, the Mennell team have shown that a certain joint movement is lost when this joint restriction is experienced. There are three movements a joint can experience: the first movement is known as an altered state of normal muscle "active play".

This is active muscular contraction such as flexing your index finger. The second movement is known as "passive play". This is the movement your index finger will be moved when pushed by another finger. Notice how much farther your index finger will bend as compared to active play.

The third movement is one very few understand or will notice exists. This movement was coined by the surgeons and is called "joint play". This movement can be demonstrated on live tissues and can be recorded by xrays. Examine your index finger knuckle joint. Pull on the end of your index finger and watch the knuckle joint create a slight gap.

In some of you there will be a "popping sound", in others you will see a small separation, and with a few you won't detect a thing.

Chances are several of you have lost your joint play. When dealing with this joint play loss in the spine a "subluxation complex" develops. Research into the various effects of a subluxation are many and documented.

A subluxation can lead to an altered state of normal physiology to a state of pathology or a diseased condition.

A subluxation can lead to neuropathophysiology or how nerves respond as a result of insult or injury. Nerve irritation can lead to muscle tightness, sensory changes, and it can affect blood flow controlled by the sympathetic nerves "these nerves are usually understood in the fight or flight mechanism).

Further nerve irritation can lead to excessive pressure which can result in nerve degeneration. These changes can lead to muscle shrinking, loss of feeling, and sympathetic nerve loss.

A subluxation can lead to an altered state of normal joint movement or kinesiopathology. With a subluxation some joints become hypomobile and lose normal movement. Some joints can become hypermobile or move too much in compensation for the hypomobile joints. When joint play loss ensues the normal gaping and joint behaviour is lost.

A subluxation can also lead to tone leading to a state of myopathology. Muscles as a result of a subluxation can lead to muscular spasm. With time or severity of insult it can lead to loss of muscle function and use.

A subluxation can affect cells and how they react to insult. This is known as histopathology. Cells can be altered as to how they behave or their internal fluid as to how it flows. It can lead to cell and local tissue inflammation. Local swelling may become evi-

A subluxation can affect the biochemical reactions of a cell in response to insult. There may be a release of histamines, prostaglandines, and kinines. A local adaptive syndrome may ensue or this can lead to a general adaptive syndrome. Those of you who have read books on stress will know of Dr. Hans Seyle, a world renowned expert on stress. His documented experiments on the local and general adaptive syndromes are beyond the text of this explanation. His books are available at most stores and are very worthwhile reading.

The above responses to repeated biochemical insult can lead to a Stress Syndrome from an unapparent or seemingly minor situa-

tion, the subluxation. The manipulative axiom chiropractors seek the correction of a subluxation thereby trying to restore the normal physiological processes and hope that the reversible pathology is not too far gone so that the diseased condi-

tion can reverse. Chiropractors, Osteopaths, Physiotherapists, bonesetters of the past who employed manipulation of the spine affect the Kinesiopathology of the spine.

In other words, they induced or tried to restore normal joint movement through the elimination of joint play loss, hypomobile joints, and hypermobile

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## Birth Announcement

TENIUK

Roy & Karen Teniuk are thrilled to announce the arrival of their baby boy

Jerry John

who was born on Monday June 12, 1989 weighing 7lbs 9 ozs. born at the General Hospital Thunder Bay. Proud Grand parents are Mary Teniuk of Terrace Bay and Eve & Jerry Thrower of Schreiber.

#### THANK YOU

The family of the late Eunice Bolan sincerely thank all the wonderful people who helped to make our loss a bit more bearable. Our gratitude to Rev. Father Radamaker for the beautiful Mass and his comforting words, to the pallbearers, the choir, Kings Funeral Home and to the ladies who donated and served the lovely luncheon following the internment. Thanks to those that sent floral tributes, Mass cards and donations to charitable causes. As for our families, it is inadequate to merely say thank you. Our gratitude is beyond words. Our brother Bill Campbell was a tower of strength in arranging many details pertaining to Mother's funeral. Thank you Bill and Annette for welcoming us into your home and for giving us free rein in over coming and goings. A very special note of gratitude and love to Bill and Michelle Campbell who so generously loaned us their car during our stay in Schreiber.

We leave the people of Schreiber, Terrace Bay and Thunder Bay with much warmth in our hearts. God Bless.

> Coke & Ellen Campbell Ralph & Ruth Mayer Chris Bolan & all members of the Bolan Family

Find out how to make your work place more accessible to the Deaf employee. Call the Canadian Hearing Society at 416-964-9595, or write to us at: 271 Spadina Road, Toronto, Ontario M5R 2V3





#### THE CORPORATION OF THE TOWNSHIP OF TERRACE BAY **Notice Of The Passing** Of A Zoning By-Law

TAKE NOTICE that the Council of the Corporation of the Township of Terrace Bay passed By-Law No. 12-89 on the 12th day of June, 1989 under section 34 of the Planning Act, 1983.

AND TAKE NOTICE that any person or agency may appeal to the Ontario Municipal Board in respect of the by-law by filing with the Clerk of the Corporation of the Township of Terrace Bay not later than the 17th day of July, 1989 a notice of appeal setting out the objection to the by-law and the reasons in support of the objection.

An explanation of the purpose and effect of the by-law, describing the lands to which the by-law applies is attached below. The complete by-law is available for inspection on my office during regular office hours.

Dated at the Township of Terrace Bay this 13th day of June, 1989.

David C. Fulton Clerk-Treasurer Administrator Township of Terrace Bay 12 Simcoe Plaza P. O. Box 40 Terrace Bay, Ontario POT 2W0

Explanatory Note Re: By-Law No. 12-89

By-Law No. 12-89 changes the zone category of 88.23 hectares of land east of the Kimberly-Clark of Canada Limited pulp mill from "A" (Rural) to "MP" (Paper Products Industrial) to permit the construction of an aerated lagoon to provide secondary treatment of effluent from the pulp mill.

### Thank you

Thank you to the McCausland Hospital staff, Dr. Wilkes and all people who sent flowers and gifts. Special thank you to Tracy Shaw and Shelly Long for the extra care.

Christine & Caitlin

## Birth Announcement

Dean & Christine Broughton are pleased to announce the birth of their first daughter

#### CAITLIN MIRIAH

Born June 10th, 1989 Weighing 6 lbs, 4 1/2 ozs Proud grandparents are Richard & Patricia Slawson and William & Sylvia Broughton