

Injury Management - Bowler's Tendonitis - Part II

Suffering an injury can be an aggravating experience. Around the globe, bowlers frequently sustain injuries ranging from muscle sprains and joint strains to more severe orthopedic problems. Though not all injuries are career ending or life threatening, all require appropriate medical attention on the path toward effective recovery.

Injuries interrupt training, cause de-conditioning, and can even be discouraging. It is very difficult to bowl effectively when injured. I'm sure many of you have tried it. The bowling fires burn ferociously inside of me as well, and I can remember facing the temptation to bowl injured on many occasions.

Cumulative Trauma

The human body is designed to move in many fluid and meticulous fashions. Knowledge of the machinelike mechanisms used to produce your every move is necessary to understand the effects of bowling on the body. So how does bowling affect our body? Does throwing a 16-pound ball one way damage the body more than another? What affect does increased practice and competition have on us? Is it physically safe to twist and turn as I throw the ball to get more revs on it? These are all valuable questions that relate to this discussion of Bowler's tendonitis.

The body is subject to wear and tear and not oblivious to an occasional flat tire or a breakdown. Repeating a motion over and over again, like bowling, generates many physical stresses on our joints including the bones, muscles, tendons, ligaments, cartilage, and other supporting tissues. Too much of the wrong kind of stress, and your body will let you know, "OUCH." Are there a right and a wrong kind of stress? Read on and find out yourself.

Stress is a term used sparingly in the exercise community now a days. Today, we like to promote resistance training through wellness and health education, rather than the power training of the old days. Stress can be perceived and misunderstood just as easily as two people having a discussion. I've often been misunderstood about my position on sports medicine and bowling, and how I express that message. Oh well.

Stress can strengthen the body as in resistance training, which strengthens the muscles, bones and integrity of your joints. Stress can also tear or sheer away at those same muscles, bones, and joints if it is not induced in a mechanically correct fashion. Stress can created many physical problems, injury, that can worsen if the body is further forced in unnatural or ill-advised movements.

After extensive periods of unnatural or improper repetitive movement, muscles, tendons, and joints often become weakened and damaged. That's what bowling can do to you if your not managing the stress of our sport. The Cumulative Trauma Self-Help Manual by MacLeod and Saunders refers to this as repetitious trauma or cumulative trauma disorder. Hence, the trauma or injury occurs as a result of cumulative movements.

There are several different types of cumulative trauma disorders including tendonitis, which is probably the most prevalent. Tendonitis is irritation and swelling of the tendons involved in those repetitive movements.

***a TENDON is the attachment extending from a muscle to a bone.**

Tendonitis is a nagging ever-present injury that, once developed, never seems to go away. Tendonitis produces a dull ache or sometimes-sharp piercing pain that persists with most any movement of the specific joint. The type of pain is directly related to the severity of the injury. Many bowlers experience tendonitis once or more during a career. I generally poll bowlers when I travel and speak, and nearly 50% of them have generally identified some type of cumulative trauma injury as a result of bowling. Some more severe cases require greater amounts of treatment, therapy, and recovery, while others just demand the proper attention of the injured individual implementing home remedies. No matter what sport, tendonitis can occur to any athlete, especially bowlers.

Bowler's tendonitis

"That awful pain in my bowling elbow." "It hurts after I bowl." "It's like a dull ache that never goes away." These are a few signs and symptoms to what I've termed as **Bowler's tendonitis**. In many ways, Bowlers tendonitis is similar to tennis elbow. Bowler's tendonitis is medically termed medial epicondylitis and is the irritation and swelling of the tendons located medially at the elbow joint, or on the inside and middle of the elbow and forearm. Paralleling tennis elbow, both occur as a result of repetitive motion of bowling and our inability to manage the stress.

Tennis elbow results from the constant shock of the racket traveling up the forearm to the elbow joint. Similarly in bowling, the repetitive motion of the release and delivery is the main stressor on the wrist and forearm. Though neither seems apparent until it is a full-blown case, both are forms of cumulative trauma and therefore creep up on us when least expected.

Tendonitis will generally not heal without proper care. Ask anyone who has had it and they will reinforce it, tendonitis is the pits. The amount of pain is directly related to the severity of the injury and irritation. Some forms of tendonitis can be cared for in as little as 96 hours, while others require lengthy treatment periods.

Many bowlers experience tendonitis throughout a career. It can develop in the knee, shoulder, wrist, and more commonly the elbow joint. These are the most active of all joints that sustain large amounts of stress while we bowl. Some cases are more severe and require greater amounts of treatment, therapy, and recovery. Others demand proper attention of the injured individual implementing various assistive healing measures (those which only assist the healing process). No matter what the specific degree or extent of the injury, tendonitis is both painful and debilitating.

Chronic tendon irritation, commonly known as Bowler's tendonitis, is a problem both youth and competitive bowlers face frequently. These two populations are specifically at risk and need to be aware of the dangers and preventive measures available to them. Youth bowlers often develop tendonitis from a combination of the remaining growth processes accompanying the cumulative stresses of bowling. Competitive bowlers are also at greater risk primarily from the increased amount of bowling along with the often-fatal desire to create more ball motion (revs, tilt, and rotation). However, a decline in physical fitness level has been shown to be a direct indicator of tendonitis across the board.

4 Factors Affecting the Development of Bowler's tendonitis

Several factors contribute to Bowler's tendonitis. The presence of these factors does not necessarily cause the problem itself, but rather amplifies the risk of developing or promoting the injury. Analyze these four factors and see which, if any, apply to you.

1. **Poor Bowling Mechanics** - unnatural movement or undue forces straining the body will increase your risk. A forced or unnatural release and delivery of the bowling ball places excessive stress on the wrist, elbow, and shoulder joint. It is often seen with younger bowlers who desire to generate more ball motion. In order to do so they succumb to twisting, flipping, and rotating the fingers, wrist, elbow, and shoulder with excessive force in many directions. Your body may not immediately respond to these undue stresses, but give it time; it will sooner or later relay the message to you.
2. **High Repetition** - avoidance of this one is difficult. This is most noticeable in the work environment. Highly repetitive jobs such as machinists, computer programmers, and assembly line employees are at greater risk than those whose job is less repetitive. Bowling is a highly repetitive sport thereby demanding proper mechanics to minimize injury. Some coaches say "If it's not broke don't fix it," but those same coaches fail to realize repetitive incorrect mechanics are shearing away at a bowler's body. Ever wonder why few twisters last a lifetime? Injury abounds.
3. **Poor Physical Condition** - weak stiff muscles and joints accelerate your risk. Joint mobility, flexibility, and range of motion are terms used in the exercise community to describe the amount of elasticity or pliability of a given joint or set of muscles. A lack of strength and flexibility in a joint most certainly increases the risk of injury. Stiff weak joints are highly susceptible to the cumulative stress of our sport.
4. **Poor Ball Fit** - a stretched span or improper fit will often strain the tendons of the fingers and wrist. If you have trouble releasing the ball comfortably and effortlessly, then I'd start by having your grip and fit checked.

Take Preventive Action

Now that we have defined the more common factors of Bowler's tendonitis, we can begin planning the appropriate action toward minimizing your risk. Follow these simple guidelines and give yourself the assurance of knowing you are taking the appropriate action.

1. **Eliminate the Factors** - reducing or possibly eliminating the influences of tendonitis is your first step. Refer to the previous section for specific concerns. When you eliminate the sources of Bowler's tendonitis you are taking adequate steps toward preventing its occurrence. Remember though, there are no absolutes.
2. **Early Recognition** - recognizing when you have an injury will result in swifter action taken to ensure a productive recovery. The moment you notice any form of pain or discomfort before, during, or especially after bowling, get it examined. Tendonitis is usually recognized initially as a dull ache or slight pain after activity caused by the activity.

itself irritating the tendons. Don't wait, as so many do until it is a full-blown case of tendonitis. TAKE ACTION IMMEDIATELY and be assured it is a false alarm before you assume it. Too many instances do I hear athletes speak of "working through the pain" or "waiting 'til it goes away." This is nonsense and will only exacerbate and prolong the problem. Seek professional advice from your medical provider.

3. **Yearly Medical Reviews** - once an injury is suspected or determined, act fast. But don't wait until it has been diagnosed. You are already eliminating the causes and looking for early warning signs, so the next step is to allow the professionals of the medical community to do what they do best. Annual medical examinations are important. Don't neglect them.
4. **Improve Your Physical Conditioning Though Bowling-Specific Training** - Unfit and is unhealthy. A fit body is a strong body. Strong bones, muscles, tendons, and joints will help reduce your risk of Bowler's tendonitis. Grab a copy of our Bowling-Specific Training Program Manual and begin your bowling-specific training today.