



Epicondylitis (elbow pain)

As commonly presented in Tennis Elbow and Golfer's Elbow

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Summary

Epicondylitis is an inflammatory condition of the elbow stemming from injury to the tendon attachments at either the inside (medial aspect - golfer's elbow) or the outside (lateral aspect - tennis elbow) of the joint. Though it is commonly the result of a sports-related injury, it can also occur in activities that put stresses on the elbow joint and associated muscles.

Elbow injuries can be divided into 3 categories:

- Acute: involves a single event trauma
- Chronic: multiple-repetitive overuse
- Acute-on-chronic: single event trauma to tissue made vulnerable by overuse

A correct diagnosis is essential to providing appropriate treatment, corrective education and eventual recovery.

Acute injuries (Tendonitis)

Involves a recountable incident when the injury occurs e.g. feeling acute pain when taking a golf swing or lifting a heavy load.

A detailed examination by your physician or physiotherapist will determine the extent of your injury and make recommendations for treatment. Traumatic injury can result in muscle or tendon tears, ligament strains, dislocation and/or fractures.

What are the symptoms of elbow tendonitis?

- Elbow pain in daily activities, such as opening doors, shaking hands, holding a coffee mug etc.
- Limited movement
- Swelling and increase in temperature in the affected area
- Stiffness after rest
- Tenderness to touch
- Pain and noticeable loss of strength on muscle testing

What is the appropriate treatment?

- Initial treatments of ice, compression and/or anti-inflammatory medication.



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- Physiotherapy intervention at this early stage would include electrical modalities to decrease inflammation. Gradual range of movement exercises and stretches will be implemented as acute symptoms subside.
- Rehabilitation involves progressive exercises and eccentric strengthening. This loading of the tendon while maintaining its length has been demonstrated to stimulate collagen formation and improve collagen alignment. This is essential in prevention of re-injury by increasing tensile strength of the tendon

Your physiotherapist will analyze the mechanism of injury and implement corrective measures as needed

How long before I can return to my regular activities?

This type of injury typically takes 2 weeks for alleviation of acute symptoms and 6 to 8 weeks to restore muscle flexibility and strength. A graduated return to pre-injury activities should begin once acute symptoms have been resolved.

Chronic injuries (Tendinosis)

This category of elbow injury has its origin in low grade repetitive stresses placed on the tendons over a prolonged period of time including:

- Stresses to the inside of your elbow from repeated throwing motions (such as in baseball), especially during the late wind-up and acceleration phases of the throw
- Strains to the outside of your elbow from backhand racquet stroke
- Stresses to the outside of your elbow from repeated use of the computer/mouse
- Prolonged use of tools that stresses elbow e.g. hammer, saw, power tools
- Poorly-fitted sporting equipment

Tendinosis is commonly misdiagnosed as tendonitis and can lead to frustration for the patient. Management of these conditions differs, as does the time frame for recovery.

What are the symptoms of tendinosis?

Overuse tendinosis does not have an inflammatory component. In clinical studies, involved tendons shows signs of collagen degeneration from repeated strains. Resisted testing of the involved tendons will be painful. Typically, there is no incident of injury with pain symptoms coming on gradually.

What is the appropriate treatment?

Treatments should be geared towards collagen stimulation. This can be achieved through use of heat, deep tissue massage, dry-needling (Intra-Muscular Stimulation or IMS), acupuncture and electrical modalities such as interferential current.

It is vital to establish why this mechanical overload occurs. A physiotherapist will be able to analyze your movement patterns and advise on corrective mechanics, appropriate exercises/stretching and a progressive return to activities. In some instances, an evaluation by a professional (golf pro or tennis coach) might be of benefit to improve basic techniques

Full recovery takes longer than true tendonitis (6 to 10 weeks) and must be accompanied by strengthening including eccentric drills.



A tendon that exhibits signs of overuse tendinosis is structurally weakened and will be susceptible to further tears. Hence, an acute-on-chronic presentation where frequent injuries can be the result of a chronic condition.

It is important to remember that other factors can contribute to elbow pain:

- Cervical (neck) involvement creating weakness and/or increased tone in muscles making it more prone to overuse and tears
- Nerve entrapment in elbow
- Associated tendinosis in wrists and/or shoulders
- Upper back and scapular (shoulder blade) weakness

These associated conditions must be investigated and treated if it plays a part in the presenting injuries.

Conclusion

- A thorough, global approach to assessment is essential in establishing the correct diagnosis and thus providing appropriate treatments for patients
- An analysis of the mechanics which precipitate the injury with corrective measures implemented as needed
- Appropriate rehabilitation must include specific exercises to strengthen and stimulate the injured tendons
- Patient involvement and commitment to recovery is essential

References

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Background

The Author

Mimi Chiu has over twenty years of experience as a therapist and is the owner of Fifth Avenue Physiotherapy. She has extensive post-graduate training and has conducted injury prevention workshops for the YMCA, the Running Room Inc., and various companies in downtown Calgary.

The Clinic

Established in 1984, Fifth Avenue Physiotherapy is located on the +15 level in downtown Calgary. The clinic focuses on integrating therapeutic treatments with specific exercise regimes to accelerate a return to active lifestyles. For more information visit the clinic's website at www.fifthavenuephysio.com.