



WHAT IS BICEP TENDINOPATHY?

Biceps tendinopathy is defined as an overuse of the biceps muscle tendon that attaches into the elbow joint.

ANATOMY:

Tendons are structures that attach a muscle to bone and in the case the bicep muscle that originates at the shoulder is attached to the front of the elbow via a tendon. The bicep is responsible for flexing the elbow, supinating the forearm and the proximal fibres flex the shoulder. SEE IMAGE

CLASSIFICATION OF INJURY:

Bicep tendinopathy can be classified into the following stages:

1. *Reactive tendinopathy* which refers to a rapid increase in loading;
2. *Tendon disrepair* often follows a reactive tendinopathy if the tendon continues to be excessively loaded;
3. *Degenerative tendinopathy* represents the response of the common elbow flexor tendon to chronic overloading.

CAUSES OF INJURY:

The patient may report an increased in load on the biceps tendon, which may come from a sudden change in activities. This injury is common amongst weight lifters in the gym. Bicep curls and underarm grip chin-ups are common exercises that can lead to biceps tendinopathy.

Some other factors that can contribute to biceps tendinopathy may include obesity, diabetes, joint stiffness, muscle imbalances, smoking and hereditary factors.

DIAGNOSIS:

An extensive subjective history will guide the physiotherapist in the correct direction for diagnosis. The physiotherapist will also look for area of pain, muscles tightness and weakness, joint mobility and often test for aggravating activities. Pain will often occur on resisting elbow flexion and supination (rolling inwards) palpating the biceps tendon.

Tendon compromise will be seen on MRI or US in the way of tendon thickening, swelling and disorganisation of the tendon.

SIGNS AND SYMPTOMS:

- Pain at the front of the elbow;
- Elbow stiffness and aching;
- Thickening within the elbow structures;
- Pain referring up and/or down the arm
- Pain and weakness with elbow flexion tasks.



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PHYSIOTHERAPY TREATMENT OPTIONS:

- Deep tissue massage
- Mobilization with movement techniques
- Taping
- Joint mobilization
- Tool and sporting equipment modification
- Education
- Facial scrapping techniques
- Stretching program
- Dry Needling
- Electrotherapy
- Exercise prescription including concentric and eccentric programs

FURTHER TREATMENT OPTIONS:

Tendon injuries are a very slow healing structure and often require further medical treatment in regards to injections from a sports doctor. Common types of injections include cortisone, saline and platelet rich plasma (PRP).

