Long Head of Biceps

What is the Long Head of Biceps?

The Biceps has two attachments at its proximal (shoulder) end. One is the attachment of the short head of biceps to the coracoid process, which is a knob of bone on the front of the scapular (shoulder blade). The other is the long head of biceps which attaches inside the shoulder joint.

At this stage, the long head of biceps is considered to be the ‘appendix’ of the shoulder or a ‘monkey’ tendon. It does not seem to have an important function, and can be a source of pain. It seems to be more important in apes with different arm rotation and weight balancing on the upper limbs.

The long head of biceps may be a source of pain if inflamed, partially torn or sitting out of place. The pain from the long head of biceps usually resolves if the tendon ruptures and the surgical treatment for pain from the long head of biceps is to release the tendon (biceps tenotomy).

After the long head of biceps ruptures, or is released, there is often a bunched appearance to the muscle. Initially there is some pain, bruising and cramping in the muscle. The pain, function and strength improves over a few weeks.

Spontaneous Rupture of the Long Head of Biceps

Sometimes the shoulder has been sore for a while. When the biceps ruptures, people often experience a sudden pop, accompanied by pain and bruising. They may notice the biceps muscle appears bunched. After a few weeks of pain, symptoms generally resolve.

We do not operate for ruptured long head of biceps but the important thing to check is the rotator cuff for a possible tear with an ultrasound scan. Sometimes surgery is then performed for a rotator cuff tear.

Long Head of Biceps Tenotomy and Tenodesis

If there is a significant and symptomatic abnormality of the long head of biceps, surgery may be performed. Abnormalities include: partial tears, insertional tears (SLAP lesions), tendonitis and irritability of the biceps in the intertubercular groove. In biceps tenotomy, the long head of biceps is simply divided at its insertion in the shoulder. The divided tendon retracts and often there is some bunching of the biceps muscle in the arm (‘Popeye’ appearance). The rest of the biceps remains attached by its ‘short head’ attachment and biceps strength and function is satisfactorily maintained.

Recovery After Biceps Tenotomy as an Isolated Procedure

- Usually 1 night in hospital
- Sling for comfort for a few days
- May use arm as comfort allows
- Arm to drive automatic, power steering car by 7 – 10 days post surgery
- Light two handed activities 7 – 14 days post surgery
- Medium lifting approximately 6 weeks post surgery

In biceps tenodesis, the biceps is divided as in tenotomy, then the cut end of the biceps is sutured to the humerus. There is less chance of a bunched appearance to the biceps muscle, but generally no definite advantage in function compared to tenotomy.

Recovery After Biceps Tenodesis as an Isolated Procedure

Usually:
- 1 night in hospital
- Sling for 3 to 4 weeks
- Can drive when out of sling
- Sedentary duties with arm in sling 10 – 14 days post-op
- Light 2 handed activities approximately 4 weeks post-op
- Medium lifting approximately 8 – 10 weeks post op